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AND THE

PRESENT FINANCIAL SITUATION

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INTRODUCTION

THE CRISIS OF 1907 IN THE LIGHT OF HISTORY

BY

EDWIN R. A. SELIGMAN

INTRODUCTION

The Crisis of 1907 in the Light of History

The occasion of the addresses collected in this volume was a desire to contribute to the understanding of the crisis of 1907, and to lay down some principles which might be of service in the reconstruction of our currency system. The first question, however, that will obviously present itself, is as to whether the crisis of 1907 was primarily a financial or an industrial crisis; and it may be well, before taking up the specific problems raised by the addresses, to consider this question a little more closely.

From one point of view, indeed, every economic crisis is a financial crisis. For since values are expressed in terms of money, and since the modern business superstructure is erected on the basis of credit, every economic revulsion expresses itself through the medium of a change in prices; and since the bank is the center of credit operations, every crisis inevitably involves a revolution in the conditions of credit. From this point of view, all crises may be declared to be financial crises.

From another standpoint, however, a distinction may be drawn between financial crises proper and commercial or industrial crises in the larger sense. There may be a financial panic or crisis due primarily to temporary and sudden oscillations in the condition of the money market or in the price of securities. Such oscillations, sharp and sudden though they be, may have but little relation, whether of effect or of cause, to the general commercial and industrial interests. Of this character, for instance, were the original Black Friday in England, in 1745, and

its namesake, the famous Black Friday in 1867 in New York, as well as many spasmodic fluctuations due either to political rumors like that which followed the Venezuelan Message of 1895, or to temporary speculative manipulations, like the Northern Pacific "squeeze" of 1901. Of a distinctly different nature are those wider disturbances which are traceable to more general economic causes and which, even though they culminate in acute financial trouble, are followed by an industrial and commercial depression of more or less magnitude.

Into which category is to be put the crisis of 1907; and if in the latter, what were its causes?

At the outset it must be remembered that crises are essentially modern phenomena. We have had financial transactions, and that, too, on a large scale, for many centuries and in many civilizations. But crises, in contradistinction to temporary panics, have existed in England only since the middle of the eighteenth, and in other countries only since the beginning of the nineteenth, century. The first crisis in England, barring the financial flurry connected with the South Sea Scheme in 1720, was that of 1763, followed by the minor disturbances of 1772 and 1783, and the more wide-spread convulsions of 1793, 1810, and 1825. The first crisis in the United States was that of 1817; and it was not until 1837 that we find the first international crisis, spreading from the United States to England and then to France. In Germany the period of important crises was ushered in even later.

Crises, in other words, are products of modern economic life. Modern economic life, however, has as its basal characteristic industrial capitalism, with the factory system and the newer methods of production for a wide market. This transition to modern industrial capitalism began in England in the latter half of the eighteenth century, was initiated in America in the first two decades

of the nineteenth century, and took place on the Continent at a later date, last of all in Germany. The explanation of crises must therefore be sought in some feature of our modern capitalistic life.

The current explanations may be divided into two categories. Of these the first includes what might be termed the superficial theories. Thus it is commonly stated that the outbreak of a crisis is due to lack of confidence, — as if the lack of confidence was not in itself the very thing which needs to be explained. Of still slighter value is the attempt to associate a crisis with some particular governmental policy, or with some action of a country's executive. Such puerile interpretations have commonly been confined to countries like the United States, where the political passions of a democracy have had the fullest sway. Thus the crisis of 1893 was ascribed by the Republicans to the impending Democratic tariff of 1894; and the crisis of 1907 has by some been termed the "Roosevelt panic," utterly oblivious of the fact that from the time of President Jackson, who was held responsible for the troubles of 1837, every successive crisis has had its presidential scapegoat, and has been followed by a political revulsion. The crisis of 1857 helped to weaken the Democrats; the crisis of 1873 resulted in a popular majority for Tilden; the crisis of 1884 put Cleveland into the presidential chair; and the crisis of 1893, with the ensuing depression, brought the Republicans back to power.

Opposed to these popular, but wholly unfounded, interpretations is the second class of explanations, which seek to burrow beneath the surface and to discover the more occult and fundamental causes of the periodicity of crises. Here we find an interesting and progressive series of attempts to grapple with the difficulties of the problem. For a long time economists and business men

advanced the theory of overproduction, forgetful of the fact that there really cannot be any such phenomenon as too much actual production of wealth. With the disappearance of this doctrine there came into prominence its variant, which put the emphasis on relative, rather than absolute, or universal overproduction, that is, the overproduction of some things and the underproduction of others. This theory also failed to command general assent, for the reason that no one could show in what respects there was any underproduction of wealth, or any lack of particular products during the years preceding a crisis. Others, again, have sought the causal fact in underconsumption, alleging that the larger consumption of wealth will in itself take up all the slack of production, and thus obviate a crisis. This explanation also is inadequate, because it overlooks the fact that the real falling off in consumption comes after the crisis has developed and not before: in fact, the period of prosperity which precedes a crisis is generally marked by a prodigious increase of consumption.

The socialists, again, seek to explain crises by the existence of private property in the means of production, and contend that if we were to cease the exploitation of the laborer by the modern capitalistic method, crises would disappear. While, however, agreeing in this general conclusion, they differ in their detailed analyses. Thus Rodbertus maintains that the secret of crises is to be found in the fact that the progress of industry causes a continually greater output of product, while the exclusion of the laboring classes from any participation in this increased productivity involves a relative diminution in demand, and thus ultimately a fall in price, culminating in a crisis. Marx, on the other hand, puts the emphasis on the fact that the necessary fall in the rate of profits (which, according to him, is a result of the surplus value,

or exploitation theory) is incompatible with the greatly increased productivity of fixed capital inherent in the present system, and that the clashing of these two incongruous tendencies of modern industrial life brings about a relative overproduction of capital, and gives rise to periodical explosions. This view, finally, is sharply criticized by the latest and ablest of the socialist theorists, Tugan-Baranowsky, who in turn maintains that crises are due primarily to the fact that under the modern system it is impossible to invest the fresh accumulations of capital proportionally in all branches of industry, and that it is this relative disproportion of accumulated capital to the particular demand that causes the anarchy of the market and the recurrent convulsions of industry.

While the socialist scholars have undoubtedly made valuable contributions to the discussion of the problem, they, like the earlier economists, have erred in laying stress on the question of technical production rather than, as is done by the more recent economic thinkers, on that of business enterprise and capitalization. This is manifestly not the place to elaborate a general theory of crises. If we attempt, however, to give the bare outline of the modern explanation, it would be approximately as follows.

The problem of crises or industrial depressions is one of relative capitalization. Under the present system of enterprise, production is carried on in mass for a prospective market, rather than as formerly in small quantities to fill a definite order. Even if it be contended that certain factories nowadays are busy with producing to order, it is none the less true that numerous plants are continually being erected in the expectation that orders will be received in the future. The good times, or periods of rising prices, may be due to many causes — either in general to an augmented gold output, or in particular

to the increase in the demand for some special product, whether in the iron industry through a new navy program, or in the clothing industry through the outbreak of a war, or in any other industry through a change of fashion or what not. Prices first rise in the particular enterprise, production augments, the movement spreads to other lines of business, and the new enterprises are financed by loans from the banks or trust companies, or by the sale of securities on a capitalization proportionate to the anticipated earnings. In times of buoyancy we are continually capitalizing anticipated earnings and future hopes, and we do this through the utilization of credit on a large scale. We build railways, put millions into steel plants, "boom" land sites, and form combinations of all kinds, employing the credit facilities granted by the banks, or throwing the securities on the stock market. We "water" the stock or, if that be forbidden by law, we drive the market quotations to a high point, because we think that this is warranted by prospective earnings. Sometimes we say that we capitalize the good will or, in the case of quasi-public enterprises, the franchise; but in all cases we capitalize the future, because we believe that we shall earn an income which will justify this capitalization.

The peculiarity, however, of an up-grade movement which rests on modern credit facilities is that we wear magnifying glasses or look at the future in too roseate a light. It is a natural tendency of human nature to capitalize one's hopes and expectations too liberally. If this is done on a continually larger scale, the capitalization becomes so great that actual earnings do not come up to our anticipations or the fear of a discrepancy between actual and estimated earnings begins to obsess us. It becomes necessary to reduce the capitalization to its true dimensions, *i.e.* to a sum proportioned to

actual earnings. This process of readjustment of overcapitalized values obviously involves loss; but readjustment there must be. If the realization of its necessity is sudden, we have a crisis or panic. In the height of the period of exaltation or prosperity, something happens to disturb confidence. A chance occurrence, a mere rumor, may suffice. Some bank considers its credit too heavily engaged, or suspects the adequacy of the collateral. Just at the flood of the tide, when new demands are constantly being made, it finds itself unable or unwilling to respond. Its refusal starts or intensifies the feeling of insecurity, and with the inability of some important concern to meet its obligations, a failure occurs and the crisis is precipitated. If, on the other hand, the situation is well handled, and if the readjustment of the overcapitalized values to actual earning capacity can be brought about more gradually, we have, in lieu of a crisis, a liquidation and a period of depression which lasts until the up-grade movement again sets in.

Crises, therefore, are not necessarily the result of increased technical production. The important point is not production, but capitalization. There may be overcapitalization, without overproduction. Overproduction of particular things may indeed accompany overcapitalization, but the stress must be laid, not on the relation between production and consumption, as the older writers assumed, but on the discrepancy between the investment and its returns.

While the general features of a crisis are thus everywhere the same, the details differ in each case. Sometimes it is the banks that fail first, sometimes the general business enterprises. Sometimes it is the railway securities that first feel the strain, at other times "the industrials," and at still other times the raw materials. Sometimes the bolt comes out of the clear sky with prices

at a maximum, sometimes it is only the last stage of a period of liquidation with progressively lower prices. But however unpredictable and seemingly inscrutable the actual course of events, the fundamental explanation is always the necessary readjustment of capitalization to actual earning capacity.

That this is true of all our crises can be seen from a hasty review. The crisis of 1817 was the result of the first utilization of modern capitalist methods in America. The period of the War of 1812 was marked by three facts: first, the industrial revolution in New England and the introduction of the factory system in the textile industry; second, the great development of internal improvements through canal and turnpike companies; third, the sudden multiplication of banks to finance the new enterprises. The consequence was the so-called "Golden Age," which lasted for several years, until checked by the immense imports from England after the war, and destroyed by the collapse of the overcapitalized undertakings. It was well into the twenties before the country recovered from the industrial depression, and then came the second up-grade movement, which culminated in 1837. This was primarily a land and transportation, rather than a purely industrial, phenomenon. The canals and turnpikes in the East were now being replaced by railways, and the spread of slavery caused a rush of cotton planters, not only to the black belt, but to the pine barrens and hill country of the South. It was primarily land values that were being overcapitalized, and the process went on to such an extent that the annual land revenues of the government now exceeded the total governmental receipts from all sources of a few years before. Finally, to finance this land movement there were called into being hundreds of the "coon-box" banks, who found a champion in President Jackson in his war against the Bank of the

United States. As the period of exaltation had been unexampled, so the collapse was proportionately great. The crisis of 1837, followed as it was by those of 1839 and 1841, was still more serious than that of 1817.

It was again well-nigh a decade before the readjustment of values had been completed. The following decade was in turn marked by five striking facts: first, the gold discoveries of California and Australia, which soon initiated a general rise of prices; second, the consummation of the revolution in the media of transportation by land and water, and the settlement of the entire Mississippi Valley, the most fertile portion of the continent; third, the abolition of the corn laws in England and the opening up of a market for our incipient surplus of wheat; fourth, the era of industrial invention which resulted in the application of capitalistic methods to new classes of enterprise beside the old textile industries; and fifth, the development of free banking with the "wild-cat" institutions to provide the credit facilities for this prodigious overcapitalization. The crisis of 1857, which was the inevitable result, was perhaps still more acute than its predecessors. The continuance of its depressing influence on industry, however, was checked by the economic effects of the Civil War, which gave an artificial stimulus to many forms of enterprise.

In the period immediately succeeding the war, great changes again occurred. The transcontinental roads were completed and the Eastern trunk lines consolidated; the great wheat fields of the country were opened up under the new homestead laws, and the period of large exports began; the Bessemer process revolutionized the iron industry, and the factory system was now applied to boots, sewing-machines, and agricultural implements; the great copper and silver deposits were developed, and the petroleum output grew apace; while the greenbacks

and the greenback movement fomented the process of inflation. The discrepancy between the capitalization and the actual earning capacity of the country's business enterprises again became so overwhelming that the necessary readjustment took the form of the convulsion of 1873—a convulsion the depressing effects of which were felt with almost increasing severity for six years.

The crises of 1884 and 1893 were both less intensive and more short-lived than their predecessors, for reasons which it is now not difficult to explain. The resumption of specie payment in 1879 was rendered possible, and was followed, by a series of abundant crops which revivified enterprise, and which were aided by the use of agricultural machinery on a large scale. The energy and the capital of the nation, however, were devoted in increasing measure to the transportation industry. This resulted in a perfect orgy of new railroad construction, the entire mileage of the country increasing in five years by fifty per cent. As the overcapitalization was primarily a railway overcapitalization, the resulting reaction of 1884 was essentially a railway crisis, leading to but indirect and temporary disturbances in industry at large. Within a year or two recovery was general, and the prosperous years from 1886 onward were reflected in the existence of a huge surplus of governmental revenues. The live-stock and meat-packing business attained its high-water mark; the textile industries made great progress in the finer grades, and the ready-made clothing industry assumed vast dimensions; the iron and steel industry was revolutionized anew by the invention of the open-hearth process and the utilization of cheap ore from the Lake Superior region; the South was being quickly developed by the Northern capital that poured into the cotton mills and the coal and iron mines; electricity was applied to industry on an increasing scale,

and the country took rapid strides in its evolution from an agricultural to an industrial community.

The movement of overcapitalization, however, was somewhat checked by two important facts: the downward tilt of world prices in general, which had been falling since 1873 and which were fast reaching their lowest point; and the relative shrinkage, not only in the amount of the wheat crop, but also in the value of both the wheat and the cotton crops. The resulting reaction of 1893, which was itself partly due to the ill-timed experiments with silver legislation, was as a consequence neither so profound nor so long-continued, since the discrepancy between anticipated and actual values turned out not to be so excessive.

When we come particularly to the crisis of 1907, we find that the general causes were very much the same. The last decade has been characterized by the most unexampled prosperity in our history. The most striking initial cause is the prodigious increase in the gold supply. Whereas the annual average value of the output of gold was under one hundred millions in the first half of the eighties, and only a hundred and twelve millions in the second half, it has grown with such enormous strides that during the past two years it has reached an annual value of about four hundred millions. The result has been a constant rise of prices from the minimum level of 1896. The rapid accumulation of gold, much of which went into the bank reserves, enabled the financial institutions to expand their credit facilities many fold, and as a consequence enterprise flourished in every direction. During the last decade the record crops of cereals and cotton, the extension of dry farming, the effects of irrigation on fruit culture, the development of truck farms, and the unparalleled increase of immigration led to a remarkable enhancement of land values throughout the length and

breadth of the land; the output of coal doubled, that of petroleum more than doubled, and that of pig iron, as well as of steel, actually trebled; the huge combinations of capital, now spreading to every form of enterprise, effected prodigious economies and revolutionized business methods; and the transition from the agricultural to the industrial phase of economic development proceeded with unlooked-for celerity. Values were pushed up on all sides and the hopes of a prosperous community were capitalized with a recklessness born of unbounded faith. The pace was too rapid; the reaction was bound to ensue. In the late autumn of 1907 the revulsion was precipitated, with all the familiar accompaniments of an acute panic such as the collapse of several financial institutions, the sudden curtailment of loans, leading to the failures of some prominent business concerns, the hoarding of money, the appearance of a premium on currency, going to over three per cent, and the frantic efforts of the financiers to relieve the situation by the importation of gold, the issue of clearing-house certificates and the interference of government through the dubious expedients of the placing of a new bond issue and the emission of Treasury loan certificates.

The crisis of 1907, however, is on the whole not comparable either to that of 1857 or to that of 1873, for reasons which have thus far perhaps not been adequately discussed. These reasons may be classed under five heads.

In the first place, the very magnitude of the country's resources has been a favorable factor. The unparalleled prosperity of the past decade has made possible the accumulation of a vast reserve in the case, not only of the great corporations, but also of the average business man. This reserve has acted as a buffer to the shock of reaction, and has softened the impact through a speedy

restoration of confidence in the excellence of the country's assets and in the real solvency of business.

Secondly, the crops, while not those of a bumper year, have been large and valuable. It is significant that almost each of our great crises in the past has been preceded either by the failure of the harvest at home or by the existence of such a bountiful output abroad as greatly to reduce prices. It must be remembered that, notwithstanding all recent developments, this country is still primarily agricultural, and that upon the varying extent of our great staple crops depends in large measure the effective demand which sets and keeps in motion the wheels of business activity. By a fortunate coincidence, the crisis was attended by a phenomenon which in ordinary times would have spelled prosperity, and which in this extraordinary conjuncture helped to bring back normal conditions.

In the third place, the overcapitalization of values was somewhat less conspicuous than hitherto in our greatest industry — that of transportation. Some of our former crises have, as we know, been brought on primarily by the speculative building of railroads. But whereas in the early eighties the annual increase of construction reached ten and eleven thousand miles, during the past five years, with a railway system three times as large, the annual increment of new construction was only four or five thousand miles. The consequence has been that with the rapid upbuilding of the country the railways have grown up to their capitalization, until it is now reasonably certain that there has been for some little time scarcely any actual overcapitalization. A striking proof of the absence of any real discrepancy between normal values and the capitalization of actual earning capacity is afforded by the congestion of traffic of a year or two ago; and even with only normal business activity

it is computed that, in order to prevent this congestion in future and to maintain the railways at a reasonable standard of efficiency, there will be required an annual investment of over a billion dollars.

Fourthly, the crisis of 1907 was preceded by a period of gradual liquidation. General prices of commodities, with a few notable exceptions like that of copper, were indeed high until well-nigh the outbreak of the panic. But the prices of securities had for some time undergone a marked shrinkage. Some, quite mistakenly, attribute this shrinkage to lack of confidence engendered by the governmental policy toward industry; others, with equal readiness and no less extravagance, ascribe it to the distress caused by the exposures of the methods of "high finance" in positions of trusteeship. In reality, however, the depreciation in securities was caused chiefly by the rise in the rate of interest. In fact the one phenomenon *is* really the other; for where earnings remain unchanged, the capitalization of the earnings depends on the rate of interest. If it be objected that the price of stocks fell because of the apprehended decrease of future earnings, due to lack of confidence, the retort is obvious that this would not suffice to explain the equal or still greater fall in the capital value of bonds, private or public, with a fixed rate of interest. The depreciation was not national, but international, in character; and it applied not only to our railway and industrial securities, but to the English "Consols" as well.

The rise in the interest rate, which explains the fall in the capital value of securities, was due to several causes. First and foremost is the increase in the gold output. For, as is now well established by economic theory and reinforced by the observations of practical men, while any increase in the supply of loanable funds on the call-money market temporarily reduces the "money

rate," an increase in the general supply of standard money in the community, on the contrary, raises not only the price level of all commodities, but the price for the use of capital, which we call the general rate of interest. The increase of money as the standard of value inevitably tends to increase the general rate of interest. Again, since the rate of interest is always adjusted to the earnings of the fund of capital at the margin of its employment, the rate of interest has risen because there has been relatively less capital available for employment. The fund of free capital has been rapidly diminishing during the past few years. Hundreds of millions were destroyed in the Boer and Japanese wars; hundreds of millions more disappeared through the destruction of San Francisco, Baltimore, and Valparaiso; and countless millions in addition have been utilized to finance the more or less dubious schemes which have sprung up in all countries during the years of prosperity. Even though there was no great overcapitalization of railroads and even though many of the industrial enterprises were really legitimate, the discounting of the future was not quite ample, and the capital was invested more rapidly than the immediate returns would warrant. The replacement fund, in other words, was neither quite large enough nor quite active enough; and with the gradual exhaustion of the available free capital, interest rates necessarily rose and security values as a consequence fell.

The period of liquidation was thus a fortunate event. By checking the movement of exaltation and preventing the level of prices from being so extreme, it kept the reaction from being so great. Where the crest of the wave is lower, the shock of its break is less. Had the ascent of prices and values gone on unhindered, the convulsion of 1907 would have been far more severe. From this point of view, even those who mistakenly persist in ascribing

the lack of confidence to the President ought in reality to be grateful to him; for to the extent that he may be said to have superinduced the liquidation of the spring and summer, he assuredly contributed to mitigate the shock of the inevitable reaction in the autumn.

The fifth and final cause of the lesser magnitude of the crisis is the development of trusts. Until we attain the right perspective, it is always difficult to get a correct view of the far-reaching changes which are taking place under our very eyes. Especially true is this of such a veritable revolution as is typified by the modern concentration and integration of industry into the vast combinations known as trusts. There are indeed many disquieting and untoward symptoms in the development of which this is not the place to speak. But as against the undoubted perils of what we are all now coming to recognize as an inevitable process, we sometimes forget to put at least one countervailing advantage which is of especial importance in this connection. The modern trust, as typified in its most developed form by the United States Steel Corporation, is apt to exert an undeniably steadying influence on prices. Precisely because of the immense interests at stake, and the danger of a reaction, the trust with its consummately able management tends toward conservatism. As compared with the action of a horde of small competitors under similar conditions, it is apt during a period of prosperity to refrain from marking up prices to the top notch, and is likely to make a more adequate provision for the contingencies of the market. With this greater moderation is apt to be associated a more accurate prevision, which succeeds in a more correct adjustment of present investment to future needs. The drift of business enterprise in its newer form is thus toward a relative checking of the discrepancy between estimated and actual earnings or, in other words,

toward a retardation in the process of overcapitalization. The history of trusts is still too recent, and in not all of them are we yet able to discern the working out of what ultimately will come to be recognized as the real laws of their evolution. To those, however, who comprehend what this revolution in business enterprise really implies, it can scarcely be doubtful that the fruit of this steadying influence and of the better adaptation of the present to the future is already perceptible. Notwithstanding the quite unexampled prosperity of the last decade, the tempo of overcapitalization has been relatively less rapid and the process of readjustment throughout the world of enterprise has therefore been less extreme. Industry has slackened rather than collapsed, and the disturbance itself has been comparatively short-lived, with the prospects of an early rebound. The influence of trusts in moderating crises and in minimizing depressions will doubtless become more apparent with each ensuing decade in the history of modern industry.

While the general causes which are responsible for the crisis of 1907 have been recounted above, there still remains one point of fundamental importance. If we compare our economic history with that of Europe, we observe that acute financial crises have there almost passed away. England has had no severe convulsion since 1866, and in France and Germany also the disturbances are more and more assuming the form of periodic industrial depressions rather than of acute financial crises. The responsibility for the continuance in this country of a phenomenon which is in large measure vanishing elsewhere rests beyond all peradventure of doubt on the inadequacy of our currency system. Its defects have frequently been pointed out, but never perhaps so fully and so convincingly as in the following

addresses. It is proverbially difficult in a democracy to secure a hearing for the conclusions of experts; and yet no lasting progress can otherwise be made.

All important reforms in currency legislation have been in great part due to the influence of the practical expert. Ricardo was a stock-broker; Lord Overstone and Gilbart were prominent bankers; and in France and Germany the names of the financiers who have shaped legislation are legion. In view of the fact, however, that most successful men of affairs have neither the time nor the talent for the exposition of principles, the professorial reformer may be permitted to quote in their defense the witticism of Bernard Shaw: "He who can, does; he who cannot, teaches." We are, however, fortunate in New York in possessing among our foremost bankers men who can not only do things, but who can teach, and who can put their teaching into effective language.

In these addresses, which were delivered to large audiences at Columbia University on successive Fridays from November, 1907, to February, 1908, two facts are especially to be emphasized. The first is that the contributors to this volume are not only speaking out of the fullness of their practical experience, but that they have thought deeply on various subtle points of theory. In fact, the student will seek in vain in the scientific literature for so clear and so satisfactory an exposition of some important topics as can be found here. This is true, for instance, of the principles underlying call-money fluctuations, international gold movements, the issue of emergency currency through clearing-house certificates, and the nature and effects of commercial paper abroad. Even more valuable and significant, however, is the fact that there runs through the entire volume an unexpected harmony of thought and a close agreement, not only as to the ultimate ideal to be attained in our financial relations,

but as to the next step to be taken in the legislative reform of our currency. For all the speakers virtually agree that even more important than the inelasticity of our note issue is its decentralization. The struggle which has been victoriously fought out everywhere else must be undertaken here in earnest and with vigor.

To have gathered upon one platform these distinguished men of affairs and to have induced them to put their ideas into print was not an easy task. Columbia was, however, convinced that here was both an opportunity and an obligation — an opportunity to experts to give to the public the benefit of their mature convictions, and an obligation on the part of the university to assume its share in the education of the community and to make a significant contribution to one of the most live and urgent of present-day problems.

THE MODERN BANK

BY

FRANK A. VANDERLIP

THE MODERN BANK

The cost of the financial crisis of 1907, measured by whatever standard you choose, measured either by the direct financial losses, by the disorganization of industry, by the destruction of confidence, or by the discouragement of thrift, makes it one of the great calamities of history, the burden of which will by no means have been confined to wealth alone. That burden falls with severity on every class and on all sections of the community.

Financial crises have occurred with such periodic regularity in the United States that many have, with Mohammedan stolidity, come to regard them as "The Will of Allah," and to look alike upon banking panics and crop failures as dispensations of an inscrutable Providence, just as we once regarded visitations of plagues and fevers.

In no other great nation of the world are such financial catastrophes regularly enacted. Nowhere else may be found an important financial system subject to such violent turbulence as is the money market of the United States.

If there is any lesson to be learned from history, then there is none clearer than that the financial system of this country inadequately fulfils its functions and ineffectively serves the interests of commerce and industry. If there is any lesson to be learned from experience and example, there is none more obvious than that the other great nations have evolved orderly systems of finance which in their application to the problems of banking and currency are immeasurably superior to our own, and that there are no inherent reasons in the position of our affairs which

would prevent our profiting by their experience and example.

If these general statements are true, if their force is not exaggerated, then there can be few subjects that are of greater importance for general public consideration. If the crisis, the effects of which still surround us, has been a national calamity; if similar crises have come and under unchanged conditions are likely to continue to come, with periodic regularity; if intelligent examination indicates that such disturbances bear no relation of necessity to general commercial development; if the example of other nations, working under financial systems different from ours, shows comparative freedom from such crises,—then clearly it is time to give to these somewhat intricate problems the consideration which their importance merits. I believe it is a wise and valuable step for this University to undertake to add something to general public knowledge on the subject.

The Modern Bank is the subject which has been assigned for opening the series of discourses which have been planned. In developing the subject I shall understand it to mean the commercial bank as distinct from savings banks and trust companies, and shall more particularly limit the consideration to the development and operation of commercial banking under the national banking system.

The fundamental proposition which I first wish to establish in regard to all commercial banking, is that the business of the modern bank is almost solely the exchange of credit,—to use a clear but homely phrase, the swapping of credits. The business of a bank is not in the main the reception of money and its safe keeping, nor is it the loaning of money. The money transactions of a bank are, under ordinary conditions, comparatively insignificant: almost its entire business consists of receiving from its

customers their evidences of indebtedness, which have a narrow currency, and giving to those customers in exchange the bank's evidences of indebtedness, which have a wide currency. These evidences of a bank's indebtedness are then transferred from one individual to another and from one bank to another, and in that way the credits created serve the purpose of the medium of exchange by which perhaps ninety-five per cent of the exchange transactions of commerce take place.

It is a misconception to suppose that a bank first accumulates deposits and then loans them out to borrowers. The operation is the reverse. The bank first makes a loan to the borrower and in so doing creates a deposit. The borrower exchanges his credit, his evidence of indebtedness, for the bank's credit, a deposit balance. The creation of these credits has relation to production; their liquidation is related to consumption. If production increases, the demand for this exchange of individual credit for bank credit increases; and the indebtedness incurred is liquidated as the articles upon which the financial credit was based enter into consumption.

The manufacturer buys raw material and, in order that he may pay for it, exchanges his credit for the bank's credit. The raw material is converted into a finished product and sold, and by its sale the means are provided by which the indebtedness may be liquidated. The merchant who in turn buys the manufactured product may exchange his credit for the bank credit which he will use to make the purchase; and when in turn he sells to the retailer or to the consumer, he provides the means for the liquidation of his indebtedness. That is the true business of a modern bank. It swaps its credit, which has a wide currency, for the credit of its customers, and the bank deposits thus created become the medium of exchange for the greater part of the transactions of commerce.

Obviously erroneous is the conception that so-called deposits represent an actual deposit of money. When the nature of fundamental banking transactions is understood, the error is made plain; but the conception is a persistent one and confuses much discussion of banking questions. There is comparatively little money deposited in a bank. No person can say that he has money on deposit. What he has is a credit on the bank's ledger. Such money as the bank holds belongs to the bank rather than directly to the depositor.

Resolved to its simplest analysis, the main figures in a bank's statement are, on the one side, the totals of the promises of individuals to pay the bank money; and on the other side, the promises of the bank to pay the individuals money. The one results from the other; the one has been exchanged for the other. Now while this accumulation of evidences of indebtedness — this total of credits, called deposits — are promises to pay money, they become in the aggregate an amount vastly greater than all the money that might by any possibility be available for such purposes. It should be evident that it is not possible nor desirable that a bank should keep itself in a position to pay in money all its deposits if demanded at once; just as it is evident that its customers could not redeem in money their promises to pay the bank if such demand should be made by all banks at once. There is a coöperative quality in the functions of a bank which should be understood by the bank's customers and, whether understood or not, must be accepted by them; as, for instance, in a time of panic, when they have impressed upon their minds that no matter how solvent a bank may be, it cannot possibly be in a position to redeem all the credits that are evidenced on its books in cash at a given time.

This coöperative quality ought to be more clearly understood by bank customers. They are clear enough in their

desire to enjoy the advantages of the modern banking system. They wish to convert their credit into a credit that may be used as a generally acceptable medium of exchange. They expect to share in the profits from the use of capital temporarily idle in the hands of its owners. They demand the facilities which the banking system offers them for making credits instantly and cheaply available at distant points from their places of business. But even though they gain all these advantages, they frequently see with indistinctness that they themselves must play their part in the financial mechanism; that they must recognize the coöperative nature of the system and comprehend that so-called deposits are not deposits of money, but are the book entries resulting from an interchange of credits, and that they are of a nature where their wholesale redemption at a particular time is impossible.

One of the principal functions of money is that of a medium of exchange. In the modern system of finance, however, money is so used only in petty transactions. In transactions important in amount, money is seldom or never the medium of exchange, the medium in such cases being bank credits. As I have said before, it is estimated that ninety-five per cent in value of all commercial exchanges are effected by an interchange of bank credits rather than by the use of money. It is, of course, obvious that a bank credit must be related to money and in the ordinary course must be redeemable in money. It is for this reason that a bank, after giving its customers credit upon its books, permits its credits freely to be transferred from one customer to another, and agrees to honor the credit upon demand by redeeming it in money. The bank must keep itself in a position to fulfil that obligation by having constantly in its vault an amount of money equal at least to all of the ordinary demands that may be made on it. All banks must, therefore, hold a cash reserve

against deposit liabilities. The minimum amount of that reserve in relation to the deposit liabilities may be fixed by law, as in the case of national banks, or it may be left to the discretion of the bankers, as is permitted by the laws of some states. Ordinarily it may be anticipated that the amount deposited in a bank will approximately equal the amount withdrawn. The reserves are held against those unusual occasions when demands predominate. Reserves are the only part of the bank's assets that can immediately be used to pay off depositors. Should the predominance of demand develop into a run on a bank, its ability to meet the situation must depend upon its reserves, plus the amount of its assets that may be quickly converted into cash.

Reserves, however, have another extremely important function. They furnish a natural and necessary check to inflation. Were there no immediate necessity for the redemption in cash of any portion of a bank's promises to pay, the bank, so long as it found customers who would borrow and whose obligations it was willing to take in exchange for its own, could go on indefinitely expanding its liabilities. The relation which must be maintained between total deposit obligations and cash reserves forms a definite check upon such inflation. Under proper banking methods deposits cannot expand without a proportionate increase of reserves.

Conversely, supposing a bank's book credits to have expanded to the limit permitted by the legal relation between deposits and reserves, then if the reserve be reduced and the bank is without means to make good from outside sources the deficit in reserve, it must meet the situation by the calling of loans. It must induce its customers to cancel a portion of the bank's indebtedness to them, through the bank, on its part, canceling an equal amount of the customers' indebtedness to it.

This intimate relation between loans, deposits, and

reserve is an extremely important one to comprehend. You are, of course, familiar with the legislation concerning it, and I shall recall it in but the briefest words. Under our National Banking Law, banks in the three central reserve cities are required to hold a reserve in lawful money equal to twenty-five per cent of their net deposit liabilities in their vaults. Banks in the forty reserve cities must also hold a reserve equal to twenty-five per cent of their deposit liabilities, but they may keep half of their reserve on deposit in banks in central reserve cities. Banks located in neither the reserve nor the central reserve cities are required to keep reserves equal to fifteen per cent of their deposits, although only two-fifths of that reserve must be in their vaults and three-fifths may be with their reserve agents either in reserve cities or central reserve cities.

As one of the primary objects in the organization and operation of a bank is to earn profits for the stockholders, and as under ordinary conditions these profits are increased in proportion to the size of the loan account of the bank, it is natural that banks will habitually keep their loan account as large as possible; that is to say, they will swap their credit for their customers' credit until the total credits which have been created on their books bear as high a relation as the law will permit to the cash reserves which they hold in their vaults. The governing factors are the ability of the bank to make what it regards as safe and profitable loans, and its ability to secure and to hold a cash reserve which will sustain the proper legal ratio to the credits which it thus creates and calls deposits.

Two consequences of enormous importance to the whole community flow from the condition of affairs which has been set forth. One is, that, to avoid dangerous inflation, bank reserves must be maintained in gold or its equivalent. It seems to me obvious that the danger which would follow the plan, which many bankers favor, of counting in

reserves the notes of other national banks, would be extreme. Such action would break off the interrelation of volume of credit to the gold stock, and would open the door to an inflation which would be limited only by the bounds that the laws might place upon the issue of bank-notes. These limits are now marked by the total of interest-bearing obligations of the United States and the total capital of the banks. Should the law remain unchanged, it is easy to see how some national disturbance might sharply increase the total of interest-bearing obligations, create a basis for dangerous inflation, result in extraordinary exports of gold, and bring our whole financial system face to face with a crisis at the very moment when such a crisis might be most dangerous to the life of the nation. Whatever new legislation we may have, there should always be and remain embodied in it the principle that a bank reserve must be definitely related to the stock of gold in the bank's vaults.

The other important consequence to which I have referred follows from the fact that, while two of the fundamental qualities of money are that it must be a medium of exchange and a store of value, its use for either of these purposes is a varying one. Under the development of our banking system very little money is ordinarily used as a store of value. Occasionally, when confidence is disturbed, distrust of banks widespread, and panic conditions prevail, that function of money assumes the utmost consequence. If the disposition to use money as a store of value increases, that is to say, if hoarding becomes general, the entire credit fabric may fall in ruins.

Under perfectly normal conditions the use of money as a medium of exchange shows a considerable variation. Nearly fifty per cent of the people of the United States are engaged in agriculture. The results of their year's labor are concentrated in the autumn's harvest. That harvest

period marks an extraordinary demand for money as a medium of exchange. It has been estimated that during the autumn months two hundred million dollars additional currency is in active use as a medium of exchange, for which there is no such use during the remaining months of the year. The total amount of cash in the vaults of national banks is roundly seven hundred million dollars. The relation which the extra demand for two hundred million dollars of currency bears to the total reserve requirements of the national banks is thus seen to be extremely important.

During, say, nine months of the year the medium of exchange for ninety-five per cent of the transactions of commerce are bank deposits. These credits answer every purpose of safety and convenience and answer those purposes in a degree far greater than would money itself. During three months of the year a large portion of the population of the country have a very considerable need for a medium of exchange, but, having no relations with banks, are unable to make use of bank credits in the form of the ordinary bank deposit. A bank credit in the form of a circulating note answers their purpose perfectly, but our laws have been so contrived that the natural right of a bank to issue its credit in the form that its depositor most desires has been greatly curtailed. A prohibitory tax prevents all but national banks from issuing circulating notes under any conditions, while a national bank, in order to issue its notes, must first part with its funds in order to buy government bonds. As the bonds sell at a premium, it must part with more funds than the amount of circulating notes it will obtain. A governor of the Bank of England has wisely said that success in banking depends upon being able to distinguish between a note and a mortgage. There is perhaps more of the correct science of successful banking in that sentence than in any other

that was ever uttered. The business of a bank is the facilitation of the current operations of commerce, the exchange of its credits for the credit of the merchant, and when it departs from that and devotes its funds to the purchase of long-term obligations in the form of mortgages and bonds, even though they be government bonds, it has departed from the banking ideal.

There may be reasons in the enormous development of corporations and the great issue of corporate securities which warrant a bank in departing from strictly commercial business; but there is no adequate reason in the natural laws which govern good banking to compel a bank to tie up its funds in a long-term investment as a prerequisite for issuing its circulating notes. As our laws stand, there is no relation between the volume of circulating notes and the commercial demand for currency. The motive for issuing notes does not lie in the need for currency, but in the profit arising from an investment in bonds which can in part be paid for by circulating notes obtained against the collateral deposit of these bonds.

For more than forty years, under the operation of the National Banking Act, we have seen the annual recurrence of the fall demand for a larger amount of currency for use as a medium of exchange. In no single year since the passage of that act has the volume of notes shown a natural tendency to increase with this fall demand and decrease when it has ceased and currency become redundant. The issue and retirement of national bank-notes is almost entirely regulated by investment considerations affecting government bonds, and is influenced but slightly by additional demands or decreased needs for currency.

We have noted that banks will normally increase their loans and deposits to as large a total as the reserve which they hold will legally permit them to do. At all times, under normal conditions, reserves with the banks of the

whole country stand at practically the legal minimum. When the period comes that our currency is called upon largely to increase the work which it does as a medium of exchange, the only place from which this additional currency can come is the bank reserves, and a financial disturbance follows with almost as much regularity as the fall harvests follow the spring plantings.

It would seem to be one of the most obvious of conclusions that if banks were permitted to issue their credits in the form of circulating notes, so restricted as properly to safeguard the involuntary holder, the part which bank credits play as a medium of exchange would be practically uniform throughout the year, instead of there recurring such a condition as now comes with every fall, where two hundred million dollars must be taken for this purpose from the bank reserves.

If the banks are unable to make good some part of this vast withdrawal through gold imports or through treasury deposits, the effect must be that they must reduce their loans and deposits until they can bring about the legal relation. If no fresh supplies of reserve money can be obtained, it would mean that loans and deposits must be reduced eight hundred million dollars in order again to establish a legal relation after the withdrawal from the reserve cities of two hundred million dollars of reserve money. Of course, in practice part of the burden falls on other than national banks, and part of the reserve loss is made up from gold imports and treasury deposits; but after every device has been utilized to soften the blow, the withdrawal of reserve money almost invariably leads to disturbance and frequently to crisis in the money market.

There is another consideration affecting reserves, as they operate under our banking laws, which is of the most vital consequence. We have no banking system; that is to say, we have no related organization of banks. Instead

of that, we have fifteen thousand individual banks, each a financial unit, each operated in regard to its own position rather than with regard to its relation to the whole situation. A few state banks have branches, it is true, but in the main the statement of absolute individuality is correct. *E pluribus unum* has been conspicuously left out of our banking legislation.

In a time of crisis two things are likely to happen. The public becomes suspicious of the banks and resorts to money as a store of value, converting its bank credits into cash and hoarding the cash. At the same time, the bankers are likely to become suspicious of one another as well as apprehensive of the probable demands on the part of their customers, and there begins a scramble for reserve money. Each institution stands alone, concerned first for its own safety, and using every endeavor to pile up reserves without regard to what the effort may cost the financial situation at large.

The result is an absolute immobility of reserves, and the effect upon the general situation is probably far more disastrous than that produced by all the private hoarding. We are, at the moment, in the midst of such a situation. Many banks are carrying reserves far in excess of their needs. They will neither increase loans and thus build up their deposit credits to a normal ratio to the reserve they hold, nor will they remit their surplus reserve to their reserve agents in the financial centers, for fear that they might be unable to get the money back again promptly if they should need it. It requires but a moderate development of fear of such character to produce a most disastrous result. There are twelve to fourteen billion dollars of deposits in all the banks in this country. The decision on the part of the managers of each individual bank to increase that bank's reserve but one per cent above the normal would absorb one hundred and twenty to one

hundred and forty million dollars, and would become hoarding on a gigantic scale.

If our laws permitted branch banking by banks of issue, such a condition could not arise. In respect to branch banking our legislation is unique. The laws of every other important nation encourage branch banking, and the results of it have never tended to enslave the people, to build up dangerous monopolies, or to increase the interest rate. The result, in fact, has been quite the reverse. Rates are kept uniform over a wide territory, the tendency toward violent fluctuations is reduced, and the privileges and benefits of safe banking are widely disseminated. I believe that there are groundless fears in many directions in regard to the possibility of evil from monopolies, but of all commodities the last one that will ever be successfully monopolized will be credit.

Throughout the terrific crisis which we have been experiencing, affecting as it has every banking institution in the United States, and bringing many of them to a point where they were forced temporarily to suspend full cash payments, we have heard no word of difficulty beyond the international border. Canada has been going through a land speculation more important, when compared to her total resources, than any speculation that has been engaged in here for many years; she has experienced all the difficulties that have followed the world-wide strain upon capital which the industrial activities of the last two or three years have engendered; she has had no wiser bankers and no more conservative business men than are the average in this country: but there has been hardly a ripple on the surface of her financial affairs, and to our shame we have seen the banks of Canada perform a great service in moving the crops of our own Northwest, while we stood financially paralyzed, with our credit fabric shaken to the foundation.

Is there not some obvious reason for this? Is it not apparent from the most casual reading of financial history that business interests of the United States are subject to periodical financial disasters which are avoided by the business interests of every other important nation? Is it difficult to see that the reason for this lies in our laws, which have warped and twisted the natural development of banking out of normal lines? We know that our bank-note system grew out of an ingenious device of a harassed government to sell bonds; that the need for the device long ago disappeared, while the unfortunately hampering laws relating to it still remain.

Some bankers are apt to answer any suggestion for fresh legislation with the declaration that the present notes are safe, and that they know of no requisite in banking greater than safety. Such an answer is no answer at all. A bank vault that cannot be unlocked may be safe, but it will poorly answer the purposes of business. A bank-note currency that has no relation to the demands of commerce may be safe, but it has in it the elements of commercial disaster, the extent of which cannot be measured by ordinary totals.

Many of our lawmakers and bankers are ignorant of the principles underlying this subject. If they were not, we should long ago have had scientific and adequate legislation, or rather, perhaps, we never should have had the legislation that has so warped and hampered the natural development of our banking system as to make it what it is to-day.

I believe that there is a grave responsibility upon the financial metropolis of the country. New York City is the financial center. The recognized financial leaders are here, and the country may well look here for advice and guidance. If it is true that the awful panic through which we have been passing can in great measure be laid

at the door of improper and inadequate legislation, and I believe that to be true, then what a solemn responsibility rests upon every one who is in a position to form public thought and to influence national legislation. It is a hopeful sign that this University recognizes its share in that responsibility.

I have attempted the briefest outline of what I believe to be some of the principles that must be recognized in any correct solution of the problems of banking and currency. The more clearly these principles are apprehended, the less likely is one dogmatically to believe that he has arrived at the only correct solution of the problems.

There are many solutions, in my opinion, that will measure true by an application of these principles. I believe that one ideal solution would combine the Scotch system of branch banks with the German system of a central bank of issue. I recognize that there is profound political prejudice against both of these ideas, but I believe that it is a prejudice absolutely lacking in sound foundation. That there are other solutions I have no doubt. The mobility of reserves which is an essential to safe banking and which is insured by the branch-banking system, may possibly be secured through a utilization of clearing-house relationships. Such relationships have been signally developed by the present financial crisis, and it is not unlikely that a legalization and expansion of the powers which clearing-houses have evolved in the stress and exigencies of the crisis may offer a solution which will be more in harmony with the present political ideas than will either the branch-banking system or the central bank.

The disposition to provide merely for an emergency currency to be secured by bonds other than government bonds, would, I believe, fail almost utterly to recognize those principles which should govern a solution of the problem. Any solution that leaves the fifteen thousand banks

of this country compelled to prey upon one another in a time of panic, with reserves immobile, and with management isolated and having such secondary regard for the general welfare, will fail of its ultimate purposes.

There are some sound objections to extending to every bank in the national banking system the power of currency issue against assets. If completely adequate redemption facilities were provided, however, I believe that the danger would be minimized, if, indeed, it would not entirely disappear. That the result aimed at, a currency expanding and contracting with the larger or smaller need for currency as a medium of exchange, will be better met by a central bank having the power of issue and covering its notes in part by a gold reserve and in part by legitimate commercial paper, created against actual commercial transactions, I have no doubt; nor do I believe that the political prejudice against a central bank will be found to be so serious as is apprehended. If a well-considered and definite plan for a central bank were presented for public discussion by those whose duty it is to offer a proper solution of the problem, much of the political prejudice would disappear.

The subject is technical. Opinions formed without a grasp of fundamental principles and conditions are without value. The verdict of the uninformed majority gives no promise of being correct. In this country we have had one great campaign of financial education. The majority of the voters of the nation now know that the free and unlimited coinage of silver was a financial fallacy. If to secure proper banking legislation now it is necessary for a similar campaign of public education, it is time it were begun.

THE STOCK EXCHANGE

AND

THE MONEY MARKET

BY

THOMAS F. WOODLOCK

THE STOCK EXCHANGE AND THE MONEY MARKET

The subject of this address is the Stock Exchange in relation to the money market. It is desirable, however, first to recall certain fundamental facts concerning what is commonly known as the money market. The essential function of banking is the mobilization of capital in the form of banking credit for use in the multifarious activities of industry and commerce. Banks, as Mr. Vanderlip pointed out in the preceding address, in a sense bring credit into practical being and set this credit to work in various ways. Taking the banking business of the country as a whole, the largest use is found for credit in bringing about or assisting the actual production, manufacture, transportation, and distribution of commodities of general use, such as food, fuel, and clothing.

Credit of this kind is made in the shape of *commercial paper*, which is discounted by the banks, this paper being simply the note of an individual or individuals or of a corporation — a promise to pay on a certain date. The general theory of commercial paper is that it represents borrowing of a purely temporary nature for a purpose purely temporary in character. This purpose is, stated very simply, the financing of commodities in process of manufacture and distribution up to the point where they enter into consumption, it being understood that the consumer's purchase provides the means of repaying the credit borrowed.

In other words, commercial paper provides a very large part of the business community with its *working capital*,

and the capital or credit thus provided goes for the most part into the materials of production, being returned by conversion of those materials into usable commodities and the sale thereof. It is contrary to the general nature of things that the proceeds of temporary loans should be used as fixed capital and sunk in the instruments of production, such as land, buildings, and machinery, and the like, whence in the ordinary course of events it is not quickly recallable. It must be remembered that banks cannot safely tie up depositors' money in fixed loans of this kind, for they are always liable to be called on by those depositors for payment. As a rule, a bank arranges its purchases of commercial paper in such a way that there is a constant process of repayments going on — a constant stream of maturities falling in. This credit is, of course, put out to work again as fast as it comes in, but it is the essence of sound commercial banking that it should periodically return to its source.

Probably two-thirds at least of the banking credit of the United States in use in the form of bank loans is employed as working capital in this way and is represented in bank safes by commercial paper. And while there is at times — as in the last year or two probably — a certain amount of unwise temporary borrowing for the purpose of fixed investment, the great bulk of this credit truly represents working capital employed in the preparation and distribution of commodities of general use. Next to commercial paper, the principal use of banking credit in the United States is found in loans upon securities. These loans differ fundamentally in more respects than one from loans which are made in the form of commercial paper. In the latter case a bank advances credit to an individual or individuals without security, trusting entirely to what is commonly called the individual credit of the borrower. In the case of loans on securities the bank takes, not

merely the borrower's note, but also collateral security in the form of stocks or bonds of corporations, states, or municipalities. Thus the latter is a secured loan in the ordinary sense of the word, while the former is not. The bank, moreover, in the case of security loans, is secured further in that it does not advance to the borrower the full market value of the collateral security deposited, but only a portion thereof. The practice is that the borrower deposits securities to the extent of at least twenty per cent market value over the amount of the loan, and that this margin of twenty per cent is kept up during the life of the loan, whether it be a call loan or a time loan. Thus in the case of loans on securities, the bank which makes the advance is fortified, not merely by the note of the borrower, but also by securities of a market value twenty per cent greater than the amount of the loan. As a matter of fact it may be said that in practice the reliance of lenders is apt to be mainly on the collateral of the borrower.

The character of a security from the point of view of the banker who lends upon it is determined by the ease or certainty with which it can be sold — in other words the degree of its convertibility. Consequently the existence of a market for securities is the first requisite for any system of lending on securities. Without such a market there would be very little credit used in this way — and for that matter we may say that there would probably be very few securities in existence. For while the corporation idea is quite practicable — and, indeed, is to some extent practised — in the case of enterprises where but a few men are concerned and where ownership of interest is permanent and unchanging, its great extension has been rendered possible only by enlisting the active interest of the multitude, and for this a wide and free market is an indispensable piece of machinery. Hence the existence of the stock exchange, without which the modern system

of corporate enterprise — the railroads being the most notable example — would certainly not have attained to anything like its present growth.

Corporation securities, whether evidences of ownership such as stocks, or evidences of debt such as bonds, practically all represent capital mobilized for the purpose of fixed investment in the instruments of production and distribution of commodities such as land, machinery, railroads, buildings, and the like. Just as a bank mobilizes capital for temporary use in discounting commercial paper, a corporation mobilizes capital for permanent use in fixed plant. It divides this capital into convenient shares, which are readily transferable from one owner to another, thus enabling small capitalists to invest in enterprises which would otherwise be closed to all who could not command capital in very large amounts. Just as commodities of general use are manufactured with a view to their consumption by individuals, so we may also say that the ultimate destiny of securities is lodgment in the hands of people who practically consume them, namely, investors. For to all intents and purposes securities placed with investors may be considered as more or less consumed. At least they are removed from what may be called stocks on hand. The investor buys securities in order to obtain a return from them, and usually also with the hope that they will increase in value while in his hands. The greater the security of the yield from a bond, the greater the stability of dividends on a stock, the more attractive it is from the investor's point of view; and we may set it down as a principle that, according as the margin of safety increases in the case of bonds and according as the earning capacity represented by stocks increases, both bonds and stocks tend to be more largely consumed by investors.

The production of commodities of general use is carried on by manufacturers ahead of current needs. Goods are

made in advance of the actual demand for them. They are carried in stock pending their sale to the retailer, and frequently are made many months ahead of the time when they are needed for consumption. In other words, the needs of the consumer are carefully studied in advance and provided for as far as the ingenuity of man can provide for them. What is true of commodities is in the main true of securities. The methods of that portion of the financial world which is generally concerned with the making and the merchandizing of securities are such that there is always in existence a large mass of securities, both stocks and bonds, which are intended ultimately for consumption by investors. I must not be understood as saying that securities are always created in good faith and with the idea that they will ultimately qualify for the conservative investor, — very far from it. But I feel entirely safe in saying that securities are all created originally with the idea that they can be sold for money, and they cannot be sold for money unless the buyer thinks that he at least can sell them again. This he cannot do unless they possess, or appear to possess, real value, actual or potential; that is, unless they have, or seem to have, the power to return interest or dividends. The only value that a security can have is, in the long run, the kind of value that appeals to the investor; namely, that which rests on the capacity of these securities to yield interest or dividends. Not even a speculator will buy a security of any kind unless he thinks he sees some potential value in it, and this value must have ultimate reference to its income-paying capacity. There must be some potentiality of this kind, however remote; otherwise the securities cannot be sold even to a speculator, and if they cannot be sold they will not be made.

By reason of these conditions there is always in existence a large mass of securities which have been created with an eye to their ultimate sale to and consumption by investors,

and this mass of securities may be regarded as undergoing a process of preparation for the investor. In this mass there will be bonds and stocks of every kind and every grade of value, ranging from new bond issues of the most undoubted character which are ready to pass almost immediately into consumption, down to common stocks which possess at the best barely enough potentiality of ultimate value to warrant an occasional speculative purchaser "taking a flyer in them." It may be here pointed out, moreover, that in the preparation of securities for investors time is a more or less necessary element: a bond must be seasoned to some extent by regular payment of coupons — unless it be a bond of the highest character made by a borrower of the first rank — before it finally finds its way into a permanent home; and a stock also requires time to demonstrate its ability to yield regular dividends at a satisfactory rate. Again, speculation, that most potent of all factors in human activities, operates so as to bring into existence the securities at the very earliest moment that a potentiality of value can be demonstrated, and it takes time to develop this potentiality into an actuality. The merchandizing and distributing of securities give employment to a large class of people, who have a most elaborate system and who carry — as jobbers, wholesalers, and dealers at retail — a very large stock of securities to suit all tastes from the most speculative to the most cautious. The term "Wall Street" is commonly used to describe this class in the community. It includes all who make a business of manufacturing, distributing at wholesale or retail, and speculating in securities of all kinds.

Just as the manufacturers, distributors, and dealers in commodities of general use must of necessity be borrowers of money on a large scale, so is Wall Street necessarily a borrower of money on a large scale, with securities as collateral, pending the placing of these securities with the

investor as the ultimate consumer. The process, therefore, of making securities and merchandizing them after they are made gives employment to an entire class of people, all of whom must borrow money. At every stage of the process the use of banking credit is required, from the original syndicate which forms the corporation at the start or underwrites the issue, to the dealer who sells to the investor. And to this is due the fact that so large a sum of banking credit is loaned on collateral security. That this credit can be safely loaned in this way is due to the existence of a free and wide market for securities, a market which is supplied by the New York Stock Exchange.

We need not stop to consider in any detail the constitution of the Stock Exchange. All that is necessary to note is that it is a purely voluntary association, depending upon no monopoly privilege other than that which nature grants to the most efficient, and that it has attained to and holds its position by right of many scores of years of efficient service. Other exchanges exist elsewhere in the United States, but all are practically tributary to, and dependent on, the New York Stock Exchange as the primary market for securities in this hemisphere. This body has taken and habitually enforces every possible precaution to protect the freedom of its market and to prevent — so far as it can be prevented — its use for fraudulent or improper purposes. It cannot prevent rash speculations, it cannot guarantee the value of securities admitted to dealings on its floor; but it can and does do all that can be done to make and to keep a fair market for securities on its list, a market, that is to say, where buyer and seller can meet and do business openly at a fair market price. Whatever its faults may be, it is at least in every sense of the word a true market for securities.

In two things New York differs from every other financial center of the world. One is that the business of the

Stock Exchange is conducted on the basis of daily settlements, whereas practically all the important exchanges of Europe do business on the basis of monthly or semi-monthly settlements. The other is that in New York there is a "call-money" market of large dimensions, the like of which exists nowhere else on the globe. The latter is rendered possible by the former and could not exist without it. The rules of the New York Stock Exchange permit contracts which may be called futures or time bargains under certain conditions. Stocks can be bought or sold at "sellers'" or "buyers' option" for thirty or sixty days. As a matter of fact, however, practically all the business is conducted either for cash or as it is termed "regular way." Transactions for cash are settled on the day the transaction is made. Transactions made "regular way," which account for nearly ninety-nine per cent of all the transactions made on the Exchange, are settled on the day following their making. The rules require that the seller of securities shall make delivery of them on the next full business day following the sale, not later than 2.15 P.M. If at that time, which is known as "delivery hour," the seller has not delivered the securities which he has sold to the buyer, the buyer can, if he so pleases, enforce delivery by having the securities bought in on the Stock Exchange "under the rule," at the cost of the seller who failed to make delivery. If he does not do this, the transaction goes over to the next business day, when the same conditions rule. It may be stated here that the clearing-house system now in use for many years by the Exchange saves an immensity of trouble to everybody by eliminating the duplication of deliveries. It in no way, however, affects the main principles of the case and hence need not be considered here. The chief point is that the New York Stock Exchange furnishes a free market for securities on the basis of cash at twenty-four hours. Consequently call loans on security

collateral are possible, for the stock market furnishes the means of paying loans if liquidation is necessary.

You are doubtless familiar with the nature of a call loan. It differs from a time loan merely in that repayment can be demanded by the lender on call or tendered by the borrower at will. The only restriction which is observed in the matter of call loans is that it is not customary in Wall Street to demand or to tender payment of call loans on any day after 1 P.M. on that day. A time loan, of course, is made for a definite period at a definite rate of interest and has a definite maturity; the interest rate on call loans may change from day to day. The existence of a large call-loan market is the feature which is characteristic of the New York money market, which distinguishes it from other money markets, which most definitely expresses the relations of the Stock Exchange with the money market, and which forms the main subject of present consideration.

Of the total mass of credit used in security loans in connection with the operations of the financial community, probably two-thirds at least is loaned "on time." Houses which are engaged in the process of merchandizing securities — chiefly bonds — naturally have to provide for their requirements mainly in this way, as their stock consists largely of securities which are not quickly convertible into cash because speculation is a comparatively small factor in the market therefor. Houses and individuals which are engaged in semi-speculative operations such as promotions are governed by the same necessities and must be sure of their resources; at least they cannot safely place themselves in a position where they may have to find large sums of money at a day's notice. Stock-brokerage houses — commonly known as commission houses — who conduct a general investment and speculative business for clients also find that it is very advisable to

provide themselves with "time money" to the extent of at least one-half of their normal requirements. If a house of this character has a general borrowing capacity of five million dollars — which means a capital of somewhere between one and one and a half millions — it will in normal times, when doing business up to its capacity, carry probably two million dollars of time money, relying on the call-money market for the balance. Generally speaking, it is true that in times of extreme monetary ease, when bank reserves are large, the proportion of money loaned on security time loans tends to decrease because borrowers are willing to take the chance of daily borrowing at low rates. Also when the money market is notably stringent, the proportion borrowed on call tends to rise because lenders are loath to make fresh time loans as the old ones mature, preferring to keep their money out on call. Thus the volume of call loans tends to swell at either extreme of money rates, in the one case being forced on the market by lenders who are overstocked, and in the other case being eagerly sought by borrowers who must have accommodation. This is one reason for the wide fluctuations in call-money rates recorded every year. We shall presently see that there are others.

Time loans in the financial district are privately made, a large business being done by money brokers who put out money on commission for the lenders. Their task is to seek borrowers or lenders, as the case may be, and to bring them together. Of course a great many loans are made without the intervention of brokers at all, the borrower himself "shopping" for his money and making his own negotiation. For "call loans" there has been established on the Stock Exchange a regular and open market, where a large business is done every day in normal times. And while a large call-loan business is done privately outside of the Exchange, the transactions at the money post

on the floor have a large influence in making the ruling rates. The call-money market on the Stock Exchange usually opens at about 11 o'clock on full business days. Saturday being a half day's business only, there is no delivery of securities on that day, and Friday's and Saturday's transactions are settled on the following Monday. There is no call-money market on Saturdays. At about 11 o'clock the banks in New York City know more or less what their balances are as a result of that day's clearings, and by that time they have called such loans as they need to call in order to meet their requirements if they have such requirements. Sometimes occasions arise when they have to call loans for payment a little later in the day, but as a rule they know more or less how they stand at about 11 o'clock and have acted accordingly. Brokers also know more or less what the day's requirements are and whether they have "money over" or need money. At about 11 o'clock they gather at the money post on the floor of the Stock Exchange and the business of borrowing and lending begins. Brokers are there, representing banks and institutions with balances to lend; other brokers are there with their own surplus, — balances which will not be needed that day and which represent perhaps their own private capital that is temporarily unemployed or money borrowed on time for which they have no present use. A record of an informal character is kept at the post of the loans as they are made, with amount and interest rate, and a fair average of the transactions up to about 11.30 A.M. is struck; and the fair average rate resulting from these transactions is in normal times taken as the renewal rate on standing loans for that day. Of course, this rate is really determined in the main by the banks themselves, for the amount of bank money at the post really makes the market rate. Brokers who have call loans standing with each other renew these loans for the day at this renewal rate. The banks them-

selves make their own renewal rates directly with their own borrowers, and the renewal rate at the Exchange governs principally the loans between Stock Exchange firms. While there is, as a rule, general correspondence between this renewal rate on the Exchange and renewal rates made by banks and other institutions, it not infrequently happens that the renewal rate on the Exchange, especially in times of stringency, tends to be somewhat lower than the rates made by the banks.

By reason of the unwritten law in Wall Street that call loans shall not be disturbed after 1 P.M. borrowers know at that hour how they stand as regards existing loans. But it may happen that securities which they expect to receive may not be delivered to them, or that securities which they expect to deliver cannot be delivered on that day, and at 2.15 P.M., when the delivery of securities ceases for the day, they may have "money over" or may "need money." As a consequence there is, around this time, usually a fresh outburst of activity in money after two hours of dullness, those brokers with "money over" supplying the needs of those who want money, and by 3 P.M., the process is completed for the day.

In ordinary times the amount of money loaned at the money post in the Exchange is not very large. But in abnormal times, when there is disturbance in the money market and activity in the security markets, very large amounts are borrowed and lent on the floor. There were days during the recent stringency when probably twenty or thirty million dollars were borrowed and lent, and when the money post in the Exchange was the storm center of the entire disturbance. This was notably the case on that afternoon when the famous twenty-five million dollars bankers' pool was hurriedly formed to supply the needs of the Stock Exchange. In point of fact, it may be said that the money market on the Exchange is a very faithful

index or barometer to the call-loan market generally; and when little business is done there, it means that there is little change in conditions, standing loans being renewed instead of shifted. Whenever there is a general disturbance or shifting of call loans, it is quickly reflected on the floor of the Stock Exchange.

One disadvantage sometimes results from the workings of an open call-money market on the floor of the Stock Exchange, and it arises from an extension of the principle of equality in the matter of credit so far as purchase or sale of securities is concerned — which is one of the fundamental principles of the Exchange — to the matter of borrowing money, which is quite another thing. The rate for strong borrowers with good collateral is frequently made by the bids of weak borrowers with poor collateral, which should not be the case, even when, as I have previously pointed out, the main reliance of lenders is apt to be on collateral. Individual credit should count for something at all times in the money market, and to the extent that the Stock Exchange system of call-money borrowing and lending tends to obscure this, it may be considered as defective.

We have seen whence comes the demand for loans on securities. It comes from the people who, as promoters, syndicators, merchants, jobbers, brokers, or speculators, are carrying that floating mass of securities of all kinds (ranging from savings-bank bonds to non-dividend-paying stocks) which has not as yet gone into the hands of permanent investors, whether they be corporations or individuals. Whence comes the money that is loaned to these people on these securities?

New York's position as the financial center of the United States is, of course, the principal answer to that question. This city, offering employment for capital under conditions of almost absolute safety, naturally attracts capital

very strongly as against any other section. Even were there no National Bank Act creating reserve cities, New York's banks would naturally tend to become to a very large extent the depositaries of the nation's surplus cash. Under the National Bank Act New York is in effect the permanent holder of a great deal of cash, representing a portion of the reserves of country banks deposited with New York national banks at interest. This country money is one of the most important factors in determining money rates in New York. Besides this there is, of course, a large volume of private capital of all sorts in New York which finds employment in connection with the Stock Exchange. Insurance companies, savings banks, large corporations whose principal offices are in New York, all these add their quota to the great volume of banking capital available in this city. But probably the country bank money, as it is called, is the most powerful determinant of call-money rates in the long run. Every year there are certain important pulsations of money circulation in the United States, arising chiefly from the planting and harvesting of the crops in the spring and the fall. To carry through these operations and the moving of the crops when harvested, cash has to be sent in great volume into the country, where it is scattered as a fine rain, so to speak, over a large area, paying farm hands for their labor and farmers for their crops. This money returns again gradually through the small streams and rivers of trade to the reservoirs or storage lakes where it is kept until it is again needed. New York is such a storage lake; it is drawn down in the spring and in the fall, and it is filled up in the summer and the winter. New York also distributes most of the interest and dividend money disbursed by the large corporations, which makes a small monthly pulsation in circulation, and it also is the center of mercantile settlements — to say nothing of its being the foreign exchange

market of the country as well. The play of the various factors connoted in these things upon the call-money market, which is also acted upon by the forces of speculation in the stock market, necessarily makes the call-money market a most delicate and sensitive piece of machinery, the equilibrium of which tends to be considerably unstable, except in periods of general business inactivity, when large masses of capital are out of employment.

Inasmuch as the call-money market consists largely of the fluctuating surplus cash of lenders and the fluctuating requirements of borrowers, it is quite natural that it should fluctuate violently, for it is subjected to an ebb-and-flow movement of dimensions very large in proportion to its total volume as a result of the movements of cash already referred to. Moreover, it must be remembered that there is no central governing influence in the call-money market, either in the shape of concentration of borrowing or in that of concentration of lending. The open market established on the floor of the Stock Exchange cannot be considered a governing influence at all in the true sense of the word. There is open competition among lenders at all times when money is easy, and only in the face of panic is there, as a rule, anything like concerted action on their part. In times of ease competition among lenders is very keen in character and has the effect, in all probability, of driving rates lower than they would otherwise go. Conversely, when money commences to become stringent without the danger point of panic having been reached, the absence of concerted action on the part of lenders leads to perhaps unnecessary alarm and unnecessary shifting of loans. This brings about an unnecessary restriction of accommodation which would be avoided if concerted action were the rule. So far as borrowers are concerned, of course, competition becomes extremely active whenever the market hangs out danger signals. The absence of a

central governing factor in the money market such, for example, as is the Bank of England in London, the Bank of France in Paris, or the Imperial Bank of Germany in Berlin, is very noticeable and must be considered one of the factors which tend to aggravate the fluctuations in call money. Of late years, moreover, another somewhat aggravating influence has been felt in the shape of what have come to be known as "out-of-town" bank loans. These are loans made by out-of-town institutions acting through New York banks and trust companies, these banks and trust companies lending money on instructions from the out-of-town banks and holding as custodians for account of these banks the securities deposited as collateral for the loans made.

This practice grew up several years ago as a result of the desire of out-of-town banks to get the benefit of the high call-money rates ruling at the Exchange. Instead of leaving their money on deposit with the New York institutions, allowing the latter to lend this money for their own account, the out-of-town banks concluded to make direct loans themselves. In these cases the New York institution acted simply as agent under instructions, having no control over the loans made and being simply the temporary depositary of collateral. This practice first attracted attention as a dangerous element in the situation in the summer of 1902. At that time a quiet investigation developed the fact that something over one hundred million dollars was being lent in this way by out-of-town institutions, subject to the call of those institutions. It was a time of considerable stringency in the money market, and New York bankers felt that the existence of a mass of credit of these dimensions not subject to control had within it the potency of disaster. These loans do not figure in the weekly bank statement and, of course, are supported by the New York cash reserve. It is not generally known that a year

ago the same condition existed, but to a much greater extent. In December of last year it was estimated that over four hundred million dollars of money were being loaned in New York City for account of country institutions, over which loans the New York banks had no control whatever. In view of what has happened in the last three months we may be truly grateful that the storm did not break as it might have broken twelve months ago, instead of coming, as it did, after many months of very severe liquidation, during which these direct loans by country banks were enormously reduced.

We may summarize, therefore, the factors which combine to make the call-loan market a very unstable thing in the matter of rates as follows: First, the fluctuations caused in the volume of credit naturally offered at call by the seasonal ebb and flow of cash in connection with agricultural needs. Second, the lack of unity of action on the part of lenders generally. Third, the intervention of outside lenders acting independently of the local banks; and fourth, the fact that the call-loan market is really the storage place for the nation's surplus credit, and consequently has to take up all the stress resulting from changes of stress at other parts of the credit system. To these factors we must add another most powerful factor at times, and that is speculation in the stock market. We have already noted the fact that according as securities more clearly demonstrate the stability of their values they tend to pass out of the floating mass of securities into the hands of investors. It is necessary now to note certain other general truths with respect to consumption of securities by investors. The first is that every panic or every severe decline in prices brings investors into the market with their cash, looking for bargains. This year has furnished a very notable demonstration of this fact, for "odd lot" buying has been a conspicuous feature during the very worst times of the panic.

The second is that speculation carried to unwise extremes in advancing prices has a precisely contrary effect, tending to attract securities from investors' hands back into the floating mass whence they were taken by those investors. Remembering that investors' purchases, by taking securities away from Wall Street, enable repayment of money borrowed on those securities, and conversely that investors' sales force increased borrowing by Wall Street, it is clear that here is one reason why speculation when it becomes active tends to absorb more money in security loans. Another reason — fully as potent — is that in a period of active speculation there is much shifting of loans, and in a period of rising prices every time a loan is shifted it means the borrowing of more money on the same securities, for rising prices mean more security in the same certificate or bond. Thus, speculation in securities tends to attract securities to "Wall Street" to begin with and causes, in addition, the same securities continually to absorb more credit, which, of course, has a powerful effect upon call-money rates.

Conversely, a period of liquidation in securities, such as we have had this summer and fall, tends to attract investors and, in addition, by lowering prices, to relieve a certain amount of credit on the shifting of loans — the whole tending to lessen the strain on the call-money market, other things, of course, being assumed to be equal.

Viewing the whole matter generally, so far as the call-money market is concerned, it is not difficult to understand why it tends to swing constantly to one or to the other extreme, namely, pronounced ease or downright stringency. It is a curious fact, proved by experience, that there is practically no middle course for it. Rates are either down to two per cent or thereabouts or twenty per cent and upwards. Rates on call loans rarely remain for any length of time around four to six per cent. They

either quickly fall away or quickly rise above these figures; it is usually a feast or a famine for the borrower. The fundamental reason is, as we have seen, the fact that the New York money call-loan market is the essentially mobile surplus portion of the nation's banking credit, whose volume is relatively small in comparison to the total mass and upon which very powerful strains are exerted, most of the time, in either direction.

What general judgment are we to pass upon this system of call loans and its bearing upon the business community at large? Is it on the whole a good system?

I shall not venture to urge upon you any opinion of my own, but will ask you to note certain plain facts. The first is that its very existence depends upon the system of daily settlements of the New York Stock Exchange, without which no call-loan market would be either necessary or possible. The second is that both in the case of security prices on the Stock Exchange and in the case of call-loan rates, this daily settlement system tends to make fluctuations more violent than otherwise might be the case. The third is that the wide attention necessarily attracted by violently fluctuating call-money rates must, to a considerable extent, influence money rates generally, not merely as regards time loans or securities, but also as regards commercial paper. For in the making of rates on money loans sentiment is a most powerful factor, and sentiment is necessarily very sensitive to violent changes in call money.

On the other hand, there can be no doubt that the system of daily settlements on the Stock Exchange is a great restraining influence upon reckless gambling, beyond the means of either the speculator or his broker, which in a country like this, where speculation is so powerful a factor in enterprise generally, is no small benefit.

The main thing that seems to be needed is some stabilizing

force in the call-money market, and, if I may be permitted the suggestion, it might be possible to find this force in some method of concerted action by lenders of money in which the bankers' clearing-house might play a part. I am not prepared with a plan and shall not presume to make suggestions as to details, but there does not seem to me to be any fundamental difficulty in adjusting the daily supplies of call money to the daily needs without unrestricted competition on both sides, and without wild fluctuations in money rates, which are a perennial source of amazement, and, I fear, contempt, to our foreign banking friends.

GOVERNMENT CURRENCY

VS.

BANK CURRENCY

BY

A. BARTON HEPBURN

GOVERNMENT CURRENCY *VS.* BANK CURRENCY

I. The Subtreasury

No discussion of the currency question in this country will be complete or well understood, unless it be considered with reference to our subtreasury system, which exercises a most important influence upon our affairs. The charter of the second United States Bank expired in 1836, following the memorable controversy with President Jackson. Public sentiment in opposition to the bank was roused almost to the point of virulence and so continued for several years. This bank, during its existence, was the most important supporter as well as regulator of commerce. With it eliminated, the country was largely dependent upon state banks for its circulating medium, specie performing a minor part of the currency functions of the time. State banks were extended both as to credit and as to currency far beyond the danger point and failed utterly to command public confidence. Another United States Bank was demanded. Harrison, committed to the establishment of such a bank, was elected President with a friendly Congress. Death soon followed his inauguration, and Tyler, who succeeded him, vetoed two successive measures providing for such a bank, upon hair-splitting constitutional grounds. This was a period of enormous expansion of credit as well as of note issues by the state banks, and general distrust of their condition drove Congress, in 1846, to the establishment of the subtreasury system. Its establishment at that time and under those circumstances, two bank measures having failed, was undoubtedly justified,

but its retention at the present time is inexplicable. The depositing of public money in banks, or the disposition of them in any manner other than in payment of treasury drafts or transfer orders, was prohibited. After January 1, 1847, revenues were all to be paid in specie or treasury notes, and the officers of the government were required to hold them safely. Because very little revenue was received at Washington, where the Treasury is situated, subtreasuries were located in the important cities of the country, for the purpose of facilitating the collection and for the safe-keeping of the revenue, and hence the existence of what is popularly known as the subtreasury system. It was and is a safety deposit system. Whenever the government's receipts exceed its payments, it draws into the Treasury and locks up money that should be left in circulation at the service of commerce. This tends to produce a stringency in the money market, to raise the rates of interest, and to reduce the value of property.

Suppose that the various states, counties, cities, towns, and villages, as their taxes or revenues were received, should lock them up, only to be paid out in meeting their expenditures — under such conditions, how much currency would it require to transact the business of the country? This is not a banking system, it is the system of the safety-deposit vault, or the stocking of the ignorant or suspicious citizen, who needs must have within his own grasp the actual money, who has no faith in credit, and who refuses to contribute anything to maintaining the affairs of a business world, carried on and enlarged by instruments of credit. As early as 1853–1854, the accumulation of funds in the Treasury produced such distress in the country that Secretary Guthrie, in order to relieve the situation, purchased government bonds at a very great premium, thereby restoring money to the channels of trade. From that time until now, successive secretaries have

largely nullified the subtreasury law by buying bonds and since 1864 by depositing money, which the law of that date permitted, with national banks. Such a law and such a system of locking up funds makes the government a partner in every man's business. Merchants, manufacturers, financiers, must study the various conditions at home and abroad to determine their business hazard, but before acting they must consider the personal idiosyncrasies of the secretary and gauge, as nearly as may be, his probable action — whether he will permit money to accumulate and money rates to advance, or whether he will adopt a course tending to prevent these results.

Commerce should be free and untrammeled so far as may be, and the business interests of the country should be relieved of the "steady-by-jerks" method of overcoming the money-hoarding tendencies which the subtreasury system renders inevitable.

II. Private *vs.* Public Enterprise

Experience has shown that private enterprise, within its proper sphere, is more efficacious and calculated to produce better results than public enterprise — that is to say, than governmental adventure.

The range of ambition and the stimulus to exertion are much greater in private than in public life; one's standing in the estimation of his fellows is very largely determined by his measure of success in whatever vocation may command his efforts. Success in life, in its better sense, plus success in life in a business sense, seems to attend in greater degree upon private rather than public enterprise. For this reason matters of fundamental importance are entrusted to private interests under government control. The highways and byways and routes of trade and the transmission of intelligence by mail or otherwise are a governmental responsibility. Such responsibility is in

large measure delegated to municipal divisions of the state, as well as to corporate enterprise.

Money, that is money of ultimate redemption, is and should be issued by the government only. Such money constitutes the standard of value by which all property, all labor, all effort, is measured. The aim of the government is to have the intrinsic value, or better, the market value, equal the coin value of its money as nearly as may be. Where free coinage exists, the coin value and the bullion value naturally differ only by the cost and regulation of coinage. This is true at the present time of gold, as to which free coinage exists generally throughout the world. Not so, however, with silver. The bullion value of silver is about one-half the coin value. Silver coin circulates on a par with gold in the United States because the government guarantees such parity, the government's credit thus offsetting the deficiency in value.

The power and responsibility of the government in respect to currency are, in part, delegated to private enterprises, by empowering banks to issue their notes to circulate and perform the office of money.

The stock of money in the country, January 1, 1908, was as follows: —

Gold (including bullion in the Treasury) — unlimited legal tender, $1,604,530,493.

Silver dollars — unlimited legal tender, except where otherwise expressed in the contract, $562,770,982.

United States notes, commonly called "greenbacks," issued during the Civil War — legal tender for all debts, public and private, except duties on imports and interest on the public debt, — $346,681,016.

United States notes, issued for the purchase of silver bullion (law of 1890) — legal tender at face value in payment of all debts, public or private, except when otherwise expressly stipulated in the contract, $5,479,000.

Subsidiary, or fractional silver — legal tender up to ten dollars, — $139,630,994.

Nickels and pennies — legal tender up to twenty-five cents, $1,159,205.72.

National bank-notes, $690,130,895.

Circulating notes are issued by the government to national banks applying, upon a deposit of government bonds to secure their redemption. The banks are also required to maintain a redemption fund with the Treasury at Washington, equal to five per cent of their outstanding circulation, which notes bear upon their back the following: "This note is receivable at par in all parts of the United States in payment of all taxes and excise and all other dues to the United States, except duties on imports, and also for all salaries and other debts and demands owing by the United States to individuals, corporations, or associations within the United States, except interest on the public debt."

The government is bound to redeem these notes upon presentation, protected in turn by bonds and a deposit fund. Any national bank is obliged to receive at par the note of any other national bank in payment of any obligation owing to it. It therefore appears that these bank-notes possess legal-tender qualities, are virtually an obligation of the government, and lack the essential characteristics of a bank-note as the same is generally understood and generally in use in other countries.

The people of this country do not like metallic currency, and barring subsidiary coins, very little hard money is used in current affairs. More than four-fifths of all the silver dollars in existence are lodged in the Treasury of the United States and are represented by silver certificates in circulation, the amount being $467,731,347. These certificates recite on their face: "This certifies that there have been deposited in the Treasury of the United States of

America — silver dollars payable to the bearer on demand." On the back of the note are found the words: "This certificate is receivable for customs, taxes and all public dues, and when so received may be reissued." Silver certificates are issued in denominations of $1, $2, $5, and $10.

Gold certificates possess the same money function as silver certificates, are issued in denominations ranging from $10 to $10,000, and amount to $706,612,349.

The grand total of money in the country, January 1, 1908, amounts to $3,349,223,380; excluding the amount in the United States Treasury, we have in actual circulation $3,078,989,298, which equals $35.48 per capita.

During the recent silver propaganda, when the government was buying silver bullion monthly in the market and coining it into silver money, and later purchasing bullion and issuing legal-tender notes in payment therefor, we were very nearly forced upon a silver basis, because of the volume of our silver currency. The policy of the government in this respect finally changed, and in order to afford protection in the future, Congress has limited the denominations of silver certificates to $1, $2, $5, and $10, thereby seeking to chain their use to everyday industry and to prevent their return to the Treasury in sufficient volume to disturb the relationship between the two metals. With the same end in view, Congress also forbade national banks from issuing notes in smaller denominations than $5, and permits only a portion of their issue to be in that denomination. The government does not redeem silver certificates in gold at the Treasury, nor does it exchange gold for silver, but it does redeem silver and silver certificates by receiving them for customs, taxes, and all public dues.

Every source of revenue which the government possesses may be paid in silver, and should the parity with gold be disturbed, the entire revenue would be received in silver.

In effect, then, the government does redeem its silver money in gold and must do so under existing law, so long as the parity is maintained between the two metals, and the maintenance of such parity is the settled policy of the government. The law provides a gold reserve fund of one hundred and fifty millions, directs the secretary to maintain the same, and gives him unlimited power to issue and sell government bonds for that purpose.

Joseph's coat had many colors, and yet I have never heard it claimed that it was not a good coat. It screened his person, thus satisfying the tenets of modesty; it protected him against inclement weather, and thus preserved his physical well-being; even though it provoked the criticism of his neighbors and their descendants down to the present time.

Our currency system possesses many varying qualities, if not hues, but it is good beyond peradventure. It is not scientific; it ought to be unified and rendered homogeneous. It does not represent a carefully devised system, for our people as yet will not follow expert opinion in matters of legislation. It has many variations in debt-paying power, every phase representing the result of an earnest conflict between contending interests, yet it is all good; for all the currency which requires redemption is certain to be replaced upon demand by money of final payment. Briefly, then, this is the money provided to meet the retail necessities of our domestic livelihood and the broader requirements of home and foreign commerce, as well as the revenues of the nation.

Each different kind of currency possesses, in different degrees or respects, a legal-tender power. "Legal tender," with respect to currency, means that a debtor may legally tender such currency to his creditor in payment of the debt; and the creditor is bound to accept the same, and may be held to such obligation in the courts. Any form of cur-

rency that has the power of extinguishing a debt (legal-tender power) ought to be money. This, unfortunately, is not true as to United States currency, if we give the word "money" the meaning which economists give, and which is adopted by the leading commercial nations.

The fiat of the government gives the currency its legal-tender power; the government's mandate compels its acceptance under certain circumstances and for certain purposes. Gold coin, which is legal-tender money in this country, is simply merchandise in Great Britain.

As we have seen, the government itself is bound to redeem these various forms of paper currency in a manner which amounts practically to a redemption in gold. This makes it all the more difficult to understand why Congress neglects to systematize and to unify the same.

I have entered into much detail in order to show that all the currency in the United States is governmental currency. What is generally understood as bank-note currency does not exist in the United States. A bank-note is issued in a form with which you are all familiar, convenient for passage from hand to hand, and recites that the bank issuing the same will pay the bearer $______ on demand. It is the bank's I. O. U. It is not money, and any one may refuse to receive the same. It is, as it recites on its face, a demand obligation, and in this respect bank-notes are the same as a bank's deposits, which are also demand obligations. A bank's deposits are valued against by checks and drafts, which pass by indorsement, and such obligations constitute ninety per cent of our domestic exchange. Ninety per cent of the business of the country is done with checks and drafts. When a business man has no use for his money, he deposits it in his bank; when he has use for it, he withdraws the same and perhaps borrows from the bank in order to supply additional needs.

A bank's deposit liabilities fluctuate in amount as its customers increase or reduce their balances, and such increase or reduction of course corresponds to the varying conditions of business.

An increase in a bank's deposits is regarded as evidence of public confidence and increased banking power; whereas an increase in a bank's note obligations, which are precisely of the same general nature and character, is looked upon by some people with misgiving, as though possessing possible danger. Why danger? — for, for every bank-note issued, some good asset, presumably the promissory note of a solvent customer, goes into the assets of the bank, thereby offsetting its note liability.

III. Bank-notes

There are two theories in respect to bank-note issues — the "currency principle" and the "banking principle." The "currency principle" is illustrated by the law governing the Bank of England. Beyond a moderate fixed amount it can issue notes only in exchange for gold coin or bullion, and the theory is that a paper currency possesses practically the same characteristics as actual money and should be subject to the same regulations as to volume and in other respects generally.

The "banking principle," which appears to me to be the correct principle, is that bank-notes should represent the credit of the bank, that they should be issued against the assets of the bank, and that the volume thereof should be regulated by the credit needs of the bank's constituency. A bank located in the cotton belt, while the cotton crop was being made and marketed, would be gradually expanding its note issue, and as returns from the marketed crop were received and the notes of its customers paid, its own notes issued would come in for redemption. Thus the maximum and the minimum amounts of a bank's note issue

would be determined by the commercial demands which it serves, in the same manner as the volume of its loans and deposits is determined.

The first essential of an efficient bank-note issue is safety. A bond-secured currency may lay claim to safety, but is in violation of every principle of commercial banking. The object of allowing a bank to issue its notes is not to enable it to make money, but to enable it better to serve the public. If the bond security is good and adequate, a bank must invest more money in its bond security than it is permitted to issue in notes. To illustrate: A national bank may buy $100,000 United States two-per-cent bonds, costing $105,000, and by depositing such bonds with the Treasury, it is permitted to issue $100,000 in notes. It has paid out $105,000 and may issue $100,000 in notes. Whatever the profit of the transaction may be, the bank has locked up $5000 of its own money by the transaction, and has to that extent diminished its power to serve the public.

The utter failure of our bond-secured currency to respond to or to serve the needs of commerce is poignantly illustrated by the events of the crisis through which we are now passing. The government, though not in need of funds, has just made an issue of Panama bonds, in order that the banks might buy them as a basis for circulation. It also offered a $100,000,000 issue of one-year certificates of indebtedness, drawing interest at three per cent, printed in the form and size of bank-notes, in order that they might serve as currency and also as a basis of bank-note circulation. At the same time the Treasury had over $200,000,000 in excess of its working balance. Was there ever a parallel in governmental financiering? Borrowing money which it did not need, and paying interest which might and should have been avoided, in order to create a condition which would permit the creation of more bank-notes —

notes, bond secured and government guaranteed — which were quite as likely to go into hoarding as into circulation when issued!

Our government, sorely pressed for funds to finance the Civil War, created the national bank system with a bond-secured currency, in order to make a market for its bonds. It imposed a ten per cent tax on state bank circulation in order to force it out of existence and at the same time to force the state banks into the national system. The needs of that period were well served, no doubt; but the same laws continuing at the present time hold commerce in a strait-jacket, to the infinite loss of all.

A study of the several financial crises since the Civil War will compel any student to condemn a bond-secured currency as wholly inadequate to the needs of a commercial nation.

If not secured by bonds, how shall safety be guaranteed? An annual tax of one-fourth of one per cent levied upon the outstanding circulation of the national bank system would have raised a sum more than sufficient to redeem the notes of every bank that has failed, and that without recourse to the bonds held as security. A careful study of the national system during the forty-three years of its existence will leave no doubt in the minds of candid men that a moderate annual tax upon circulation would produce a fund ample for its protection and redemption.

Life insurance is predicated upon mortality tables gleaned from vital statistics of the human race, and such business is conducted with safety and in enormous volume. Fire insurance is predicated upon the destruction of property by fire over a period of years, and the amount of premium necessary to cover the risk ascertained with reasonable certainty. How much easier and with how much greater certainty is the mortality or longevity of banks ascertained. With more than forty years of complete

statistical history of the national banking system before us, we are justified in assuming that a moderate guarantee or safety fund is quite sufficient to protect a credit currency and to insure the redemption of any bank-notes that may be in default.

The experience of other nations, as well as the *ante-bellum* experience of many of our states, furnishes historical evidence that the safety-fund principle will afford protection and insure redemption without imposing a burden upon the resources of a bank such as the purchase of bonds involves. It gives to the currency safety and to the bank greater power to serve the public. Such notes should be a lien upon all the assets of the bank and not upon any segregated portion — a first lien, if you please.

The government that holds the redemption fund should redeem the notes of failed banks upon presentation, and would thereby, by subrogation, become possessed of a note-holder's claim or lien against the assets of the failed bank. Such provisions would protect all against loss on account of the notes of failed banks. The redemption of the notes of going banks should be insured by a gold reserve of not less than twenty-five per cent. Thus fortified and protected, we may with business certainty conclude that such a note issue would be safe as well as efficient.

IV. Redemption

Its redemption should be sure and prompt and made at the expense of the bank of issue. So much is due to the public who are asked to make use of the bank-notes. Redemption of this character is also imperative in order to insure elasticity, for retirement when the demand for its use slackens is an essential of elasticity. If currency is to circulate throughout the country, the redemption facilities must follow in its wake, in order that lawful money

may be received therefor at the desire of the holder, and in order that anything approximating inflation may be avoided. Checks and drafts, which consummate such a large percentage of our business transactions, are possessed of perfect elasticity. They are born at command and are extinguished by use. The Stock Exchange, Produce Exchange, Cotton Exchange, all the exchanges dealing in commodities, as well as all the varied interests of any considerable magnitude in the city of New York, have a currency of their own — the certified check. Actual money, or currency in any form, is practically unknown in the city of New York in any transaction except of a retail character. The bank check performs the function of payment, and if the amount reaches into the thousands, the check is certified. It is a perfect currency, it is elastic, responding in volume to any demand; it is predicated upon the credit of the parties to the transaction. Its redemption is speedy and it is unvexed by arbitrary laws. It is not subject to governmental interference. It is absolutely responsive to the demands of trade, and without it the commerce of that great city would be impossible. Checks and drafts cannot, however, serve the retail currency demands of a community, nor are they available for shipment to other localities in order to settle the balance of trade. In order, therefore, to conserve the interests of the public, banks should be permitted, within certain limitations with respect to capital, to issue circulating notes. Such notes should be protected by a lien upon the general assets of the bank, should be further protected by a lawful money reserve of not less than twenty-five per cent, and should, finally, be protected by a redemption fund in the hands of the government, accumulated and kept good by means of an annual tax levied for that purpose. They should be redeemable over a bank's counter, at the United States Treasury, and at convenient points throughout the

country, thereby maintaining the notes at par throughout the country. They should be subject to a moderate tax, as the higher the tax the higher the rate of interest charged the public. Such a currency would serve the retail demands of the immediate constituency of each bank. Its volume would respond automatically to commercial demands. The small banks of the country would first feel the need and be the first to issue notes, in response to crop-making and crop-moving demands. When their limit of issue was reached, they would, as they do now under existing conditions, call upon the reserve cities for funds. This would enable the reserve cities to make use of their note issue, by shipment to the rural districts. Their limit reached, the reserve cities would in turn call upon the central reserve cities, and in such a condition, New York, for instance, could issue and ship its circulating notes to the interior. Under no other conditions could they be made use of by the city of New York, except in supplying the local currency demands in our everyday transactions. This would enable the money centers to retain their reserve money, at the same time supplying the crop-moving and other commercial demands of the interior. It would make the rural portion of our country less dependent upon the cities; it would relieve the cities of the congestion of money in the duller portion of the year and also relieve them from the severe demands that characterize the periods of greatest business activity. It would tend to stability and uniformity in the rates of interest. It would give to business affairs a greater degree of certainty, which is a cardinal need in all commercial transactions.

It would be well, also, to permit the issue of an additional amount of currency, subject to a very high tax, that might be availed of in just such a crisis as the one through which we are at present passing.

Such a credit currency system could be well and successfully applied to our existing banking system, and in this connection I commend the plan devised by a commission created by the American Bankers' Association and indorsed by that association at their annual convention held at Atlantic City last fall.

While I believe that such a currency can be successfully applied to the sixty-five hundred banks now in existence, yet judged from an historical and scientific standpoint, the currency system of a country can best be administered through the instrumentality of a central bank of issue. England proved this and created a central bank of issue and provided that the note-issuing privilege then possessed by existing banks should revert to this central bank of issue whenever for any cause the various banks should surrender or forfeit the same. United Germany taught us the same lesson, closely following the example of England, but greatly improving upon the English system in respect to elasticity and ability to serve commercial interests. Yet in this country the manifest advantages of a central bank of issue are brushed aside on the assumption that public sentiment will not tolerate it. Public sentiment changes with great rapidity and has undergone, and is undergoing, pronounced change in the matter of centralization of power and centralization of the control of corporations in the national government. Why should not those who essay to champion the interests of the people as opposed to the banks favor a central bank with a board of direction, a majority of whom are appointed by the government, very much as in the case of the Reichsbank in Germany? Such a bank, like other business enterprises, should earn a reasonable increment upon the capital invested, but at the same time the altruistic influences, personated by the government, would largely control. All dividends in excess of a fixed rate should go

into the United States Treasury, in order to exercise a restraining influence in its business management. The note-issuing privilege and the rate-making power would be exercised, not in the interest of one locality, but of all. The Bank of England rate, the Bank of France rate, and the Bank of Germany rate exercise a controlling influence in those countries by force of example and force of competition. The Bank of France has branches throughout France, and the same rate of discount obtains at all branches on the same day.

By example, as well as money power, similar institutions could be made to exercise a most wholesome influence in bringing about a more uniform rate of interest throughout our country. A central bank could render even greater service in preventing the wide and wild fluctuations in the rate of interest which, under our present system, have such a disturbing influence upon business affairs. A disturbance in money rates seems to characterize crop-moving periods. It is natural, perhaps, that a higher rate of interest should accompany periods of business activity, in accordance with the law of supply and demand; but fluctuations at the rapid rate which obtains in this country are properly chargeable to our defective currency system. Were an adequate note-issuing power given to such a central bank, interest rates could be kept reasonably uniform in this country, precisely as they are in other great commercial nations of the world. With a pronounced trend in favor of centralization, with the popular and growing demand that all corporations, national in their scope and character, be regulated by the national government, is it not logical and fair to assume that public sentiment will presently demand that the government's receipts and disbursements shall be made through a central bank, thereby keeping funds in the channels of commerce and avoiding the embarrassment and injury which result from the ab-

sorption of funds and their subsequent deposit in a lump sum in the banks, which is the practical working of our subtreasury system; and will not an intelligent public sentiment demand that our currency — the life-blood of all industry — be regulated and controlled through the instrumentality of a government-controlled central bank of issue? The very people who inveigh against banks as a whole should demand this in furtherance of the purposes they now have at heart.

Why will not a government-controlled central bank of issue, where the banks of the country in good credit can, within proper limitations, discount their receivables, receiving the proceeds thereof in bank-notes, afford the best solution of the currency question?

GOLD MOVEMENTS AND THE FOREIGN EXCHANGES

BY

ALBERT STRAUSS

GOLD MOVEMENTS AND THE FOREIGN EXCHANGES

FOREIGN exchange is the medium by means of which we pay our foreign creditors and collect from our foreign debtors: when the supply of exchange fails, we pay our debts by exporting gold; when the demand for exchange fails, we collect our debts by importing gold. So long as both supply of and demand for exchange exist, we settle our accounts through the foreign exchange market which, like all markets, fluctuates with the relative eagerness of sellers and buyers. We speak loosely of New York owing money to London; of Berlin owing to Paris. What we mean, of course, is that on balance, New York individuals owe to London individuals. But we are the slaves of our phrases; what begins by being metaphor ends by dominating our thinking, and so we are apt to picture London as one huge creditor, malignantly collecting the last penny from unfortunate New York; and we often reason about these matters as though the pictures that our words call up were real. Platitude though it be, I repeat that international commercial and financial relations are the relations of individuals to individuals; it is individual that settles with individual. There is no solid block of indebtedness that London as an entity can call for payment from New York as an entity, or of which, if inclined to be gracious, it can extend the payment. The transactions are the transactions of individuals, and are determined by the judgment of each individual as to what is to his individual advantage; if American stocks seem cheap to London individuals, and they have or can borrow the means of paying, they cannot be prevented from buying

them, just as Americans cannot be prevented from buying French motor cars if they have the money to pay for them. So when foreign individuals commit what the Stock Exchange regards as the offense of selling securities in this market, remember that the American individuals that buy the shares are equally guilty. A seller without the corresponding buyer cannot close a transaction, and the balance of trade is unaffected by the desire of foreign individuals to sell, unless there be a corresponding desire of native individuals to buy — supported by ability to pay. The daily settlement of all these individual transactions makes the exchange market, and in the mechanism of that market we have an instrument powerful and economical, automatically making the most delicate adjustments, actuated by that most constant and reliable of all motive powers — self-interest.

By foreign exchange, we mean bills of exchange drawn on foreign countries, each bill being payable in the currency of the country on which it is drawn. The buyer of such a bill here, pays the equivalent of its value in United States money; the cost per unit of the foreign money is called the rate of exchange. Such bills are payable on demand (demand bills) or at a fixed number of days after sight or after date (long bills), although sometimes money is paid on cabled orders, known as cable transfers. In this market, bankers are the traders; they stand ready to buy at prices varying from minute to minute all bills offered for sale, and at a slightly higher rate they stand ready to satisfy the requirements of buyers by selling their own bills. Bankers compete closely with each other both in buying the bills offered and in selling their own bills to supply the requirements of buyers, and thus is created a market in which there is but little margin of profit. The bills offered for sale may be the bills of merchants with money to their credit abroad, or of brokers that have bought

securities for foreign customers and are drawing on them to reimburse themselves for the cost, etc. By far the greatest volume of exchange, however, is that created by the bills of grain and cotton exporters. The demand for bills comes from importers that must pay for sugar, coffee, silks, etc., purchased abroad; from corporations that must remit for interest or dividends payable to foreign holders; from American travelers, and the like. The market created by these conflicting requirements fluctuates within limits fixed on the one hand by the cost of exporting gold, and on the other by the cost of importing it. That is to say, the rates for demand bills fluctuate between these limits; long bills involve other elements as well; for the present, however, we will confine ourselves to the consideration of demand bills.

When there is a heavy demand for exchange and little supply, the price of exchange gradually advances. The banker, called on by his customers to draw exchange for them, finding few bills in the market that he can remit to cover his drafts, sends gold and directs its equivalent in foreign coin to be placed to his credit, and against this credit he draws. There may be no market abroad for our crops or manufactures; but gold need not be sold in order to produce money; it need only be coined. As this process can be carried on indefinitely, the cost of sending gold is obviously the limit beyond which the price of demand bills cannot advance. Let us follow this transaction in detail. The pure gold contained in one English sovereign is exactly equal to the pure gold contained in $4.8665 of our gold coins; so that, apart from charges and expenses, $4.8665 of our gold will, when sent abroad, produce a credit of £1; to this cost must be added freight, insurance, and other expenses, amounting to about one-fourth of one per cent. This brings the cost of £1 through shipment of gold to about $4.88, which is,

roughly, the gold export point for full weight coin. The exporting banker obtains his gold either by drawing gold coin from his bank or else by drawing suitable currency from his bank, and obtaining gold coin for it at the subtreasury. In either case, he obtains coin that has suffered more or less abrasion by handling, and this loss of weight by abrasion, amounting to perhaps one-tenth of one per cent, increases the cost of his remittance. Generally, however, the banker can obtain gold bars from the United States Assay Office at the nominal charge of one twenty-fifth of one per cent, although at times a larger charge is made. The banker prefers bars, because on these there is no loss by abrasion; the government can afford to give bars, because their export prevents the export of coin, and so saves the cost of coining new money to replace that shipped.

Now for gold import. When there is a large volume of bills offered to bankers, perhaps by grain and cotton exporters, and but little demand from buyers of exchange, the market gradually declines in price, while New York bankers, sending abroad the bills they buy, with little occasion to draw against them, accumulate large sums to their credit in London, with no way of getting the money back to New York through operations in the exchange market. They are not, however, helpless; they can order gold sovereigns sent here, and, once here, can have them melted down at the United States Assay Office and coined into eagles and double eagles, which they can deposit with their banks. Obviously, the amount received in dollars for each melted sovereign will mark the price the banker can afford to pay for sterling bills, and competition among bankers will prevent the rate of exchange from declining below this point by more than a fair margin of profit. The British sovereign, if full weight, will, when sent here and melted down, yield gold for which the United States

Assay Office will pay \$4.8665; the expense of sending the sovereign, freight, insurance, cartage, and kegs, will amount to about one-quarter of one per cent, so that the net yield of the full weight sovereign in dollars will be \$4.85$\frac{5}{8}$. But between the day on which the banker buys the bill of exchange in New York and the day on which he receives in New York the gold which the bill entitled him to collect in London, there must elapse the time needed to send the bill to London, plus the time needed to send the gold back (roughly fifteen days), during which period the banker loses the use of the money. This loss of interest must be deducted from the net yield of the imported sovereign, and thus, if money is worth six per cent per annum, the net yield of full weight sovereigns is brought down to about \$4.84$\frac{1}{4}$, which is the gold import point for demand exchange, when money is worth six per cent per annum. Losses by abrasion will bring down this point by perhaps one-tenth of one per cent to about \$4.83$\frac{3}{4}$. When money is higher, the import point will be lower, and *vice versâ.* There is therefore a margin of profit in buying demand bills and importing gold sovereigns against the purchase, whenever the rate for demand bills falls below the gold import point. Active exchange bankers take advantage of this profit whenever exchange prices decline to the proper point, and their competition in buying bills to cover their gold importations stops further decline in exchange rates. It is interesting to note that during the recent crisis, when gold and currency were at a premium, bankers could sell the imported gold at a premium, and this constituted an additional and very large profit; gold importers could therefore pay higher prices than ordinarily for exchange bought to cover the importations, and the stress of competition so drove up the rate of exchange that gold was being imported at a profit, though exchange rates stood at what, under

ordinary circumstances, would have been the gold export point.

Gold is, however, not always imported from England in the form of sovereigns. The Bank of England has in its vaults large quantities of American eagles and double eagles exported to England in the past and held without melting. The Bank also holds foreign coin and bar gold. Any holder of Bank of England notes can get sovereigns on demand — other gold he can get only as the result of a special bargain. When gold is wanted for export, the Bank is often glad to sell bar gold or double eagles at rates somewhat more advantageous to the exporter than would be the export of sovereigns; this the Bank can afford to do, for the expense of coining sovereigns to replace those exported is thus saved, while the exporter, if he can get bar gold on the same basis as sovereigns, avoids the losses of abrasion. Eagles are even more advantageous to the exporter, for they are bought in England by weight and used in America by count; the banker therefore gets an advantage if they are light, so long as that lightness is not so great as to make them uncurrent — practically he buys them as light and uses them as full weight. The quotations for bar gold and double eagles, as they appear in the newspapers, may seem confusing, owing to the fact that double eagles are quoted in shillings per ounce gross weight, 900 fine (the American coinage standard), while bars are quoted per ounce of gross weight, $916\frac{2}{3}$ fine (the English coinage standard); the quotation for double eagles, therefore, always seems lower. When gold bars from South African mines and elsewhere arrive in London, the owners deposit them with the Bank of England, receiving sovereigns at the rate fixed by law, unless a higher price is bid therefor in the market for the purpose of export to other quarters. The price of gold in the market cannot, of course, rise above the cost of obtaining gold by withdrawing sovereigns.

The mechanism of gold import to, and export from, Germany is practically the same as with England, the Reichsbank being required to give gold coin in exchange for its circulating notes. At times, however, German exchange has fallen below the theoretical gold import point, owing, not to the refusal of the Reichsbank to give gold, but to the practical obstacles that at times are somehow placed in the way of free export of gold. The Reichsbank does not refuse gold for its bank-notes, but German bankers say to their correspondents: "Don't ask us to get gold for you, or we shall lose caste," and on such occasions German exchange rates drop to a point that is theoretically impossible. I do not mean to criticize them: German banks, when they refuse to demand gold of the Reichsbank, do no more than our own banks and bankers did recently, when asked by foreign correspondents to collect in gold the maturing obligations of railroads and other corporations. As will be remembered, clearing-house funds rather than cash were at that time current here, and New York banks and bankers sent to their foreign correspondents the same answer as the Germans have at times sent us. I cite the German instance in partial mitigation of censure of our own course, rather than as a reproach to them.

The Bank of France is not compelled to give gold in exchange for its circulating notes; it may at its option give silver. Thus, when it is inconvenient to give gold, the bank can refuse, or, if it prefers, it can exact a premium. This power has been very moderately and very wisely used by the bank to modify foreign demands on the one hand, and, on the other, to keep interest rates low for the requirements of internal trade. Of course, when a premium is exacted, the French gold import point drops accordingly.

Between the gold export point and the gold import point, exchange fluctuates under the sway of conflicting

currents and tendencies — I had almost said emotions, for these currents and tendencies have their rise in emotions, needs, and passions as varied as life itself, whether they be hunger as expressed in the grain bill, or love of elegance in the importation of silk, or forethought in the profitable investment of capital.

This brief review will have made clear what is meant by a free gold market — a market in which current money can at all times be exchanged for gold without delay and without premium. Such a market has great commercial advantages; its stability draws business to it. London is such a market, and its commercial and financial preëminence is in great measure due to that fact. Paris is not such a market and does not pretend to be; Berlin pretends to be, but cannot always be counted on; New York was believed to be before our recent panic.

I have spoken of the exchange market as an economical mechanism, automatically making delicate international adjustments. In justification of that observation, let me direct attention to the manner in which gold, in moving from financial center to financial center, always travels by the most direct route, and that, too, not because some public official is charged with the duty of preventing waste, but because a private trader is trying to make a profit, and is incidentally serving the community; serving it perhaps better than if he had consciously determined to serve it.

Useful acts springing from self-interest have one very comforting aspect — we need have no misgivings as to their continuance. Charity may grow weary or disgusted, but self-interest, once enlisted, may be counted on to continue in operation, whether it be the business man's self-interest in a profit or the professional man's self-interest in advancement and fame. Of course, both the business man and the professional man, in addition to seeking the direct

rewards of their labor, take an interest in their work as work and make it yield them pleasure.

It is therefore satisfactory to know that, so long as the banker looks after his profits, gold will move by the most direct route. Let us suppose the United States to be exporting a large quantity of cotton to England at a time when little merchandise is being imported here from England, but when much is being imported from France. If the volume of exports to England and of imports from France were large enough, we might conceivably be importing gold from England in payment of our produce, and exporting it to France in payment for her luxuries; but, in practice, gold does not move that way. Every morning, the New York exchange banker learns by cable the Paris market rate for demand bills on London. When, therefore, he finds a large volume of bills on London offered for sale, and little demand for such bills, while there is large demand for bills on Paris and little supply, he determines, instead of drawing from New York against his purchases of London bills, to let his Paris agent draw against these purchases, placing the proceeds to his credit in Paris; against this credit in Paris, the New York banker draws his bill in francs, having thus supplied via London the New York demand for bills on Paris. He knows how many dollars each pound sterling costs him in New York, and the Paris rate for bills on London tells him how many francs each pound sterling will net him in Paris, and so he can calculate how many cents each franc will cost him. Moreover, he is not the only banker in New York that receives cable quotations; and so with a large volume of London bills offered and little direct demand for such bills, and large demand for Paris bills with little direct supply, we get a situation where New York bankers, competing with each other to buy the London bills for use via Paris, prevent the price of sterling from falling to the

gold import point; and then, as a result, these same bankers, competing with each other to supply the demand for Paris bills, by their competition prevent the Paris rate from rising to gold export point. Lastly, they compete with each other in Paris, where all are sellers of bills on London against their New York purchases of London bills, and by that competition they reduce the rate for London bills in Paris to the point, at which, other things being equal, gold will go from London to Paris. What has happened, therefore, is that instead of our importing gold from London, and then exporting it to Paris, it has gone direct from London to Paris. Why? Not because some one has deliberately set himself to benefit the community, but simply as the result of the blind working of economic forces, under the actuating impulse of individuals seeking their own profit. This tendency to work out advantageous economic results under the pressure of selfish impulses, appears again and again in all phases of business; it cannot be too strongly brought to view, because of the practical conclusion to which it points. The community will benefit most if commerce and its instruments be free from arbitrary interference by government. Violations of economic, as of natural laws, in time wreak their own vengeance.

Transactions such as those described above, where a bill on one market is bought in a second market, and sent into a third market, are called exchange arbitrage, and they are of infinite variety. Bills are drawn on Paris against German exchange; bills are drawn on Scandinavia against remittances to London; the proceeds of bills on Switzerland or Italy are sent to Paris or to London, etc.; and many of these combinations are daily calculated by numerous active bankers all over the world, who take advantage of every one sixty-fourth of one per cent of margin. Thus are the markets kept from drifting apart. It may

be asked who benefits by this competition. The answer is that the merchant benefits, the importer as a result buying his exchange more advantageously, and the grain and cotton exporter selling his bills at a better price.

So much for checks or demand exchange. Cable transfers require but a word. They differ from demand exchange in that the proceeds are paid out at once at destination, instead of awaiting transit of a bill by steamer — hence the seller of cable transfers loses interest during the time of transit at the rate of interest current in the market to which the transfer is made, and his rate for selling cable transfers is accordingly higher by so much. In abnormal times, however, the difference may be much greater; during last November, for instance, when London banks were unwilling to advance money to facilitate the shipment of gold, the possession of funds in London was an advantage, the value of which was measured by the profit on gold shipments, and this profit, owing to our currency premium, was great enough to make cable transfers unusually valuable.

Hitherto we have considered only the exchange of the money of one currency into that of another, and the mechanism by which this is effected; with long bills we enter the domain of international credit. Credit is a strange thing, delicate, sensitive, and yet hardy, — hardy enough to do the heaviest work under sympathetic conditions, and yet so delicate and sensitive that the slightest false note will cause it to shrink and withdraw; and when it withdraws, neither coaxing nor force (least of all force) can draw it back until conditions are again suitable to its temperament. When credit ceases to work for us, the burden is thrown upon coin, a slow, lumbering substitute. It is as though the main engine of a huge factory had broken down, and the workmen were attempting to do with hand tools what the machines had before been doing.

Before discussing long bills drawn by bankers here on their correspondents abroad, which bills are the principal medium whereby money rates between markets are equalized, let us consider commercial long bills. A merchant here buys goods in India or China; the seller desires to be paid when he ships the goods; the buyer cannot afford to pay for the goods before he receives them, perhaps not until he has had time to deliver them to his customers here. What happens? It may be asked, why not let the China merchant draw on the New York merchant, and attach to the drafts the bills of lading and insurance policies representing title to the goods shipped. There are several reasons.

In the first place, banks in China prefer bills on London; not only are they mostly English banks, which do not keep well informed on New York rates of exchange, but in addition the pound sterling has always been the current international money. You might as well defy a law of nature as a trade custom; such customs cannot be reasoned with. As Walter Bagehot well puts it: "In every market a dealer must conduct his business according to the customs of the market, or he will not be able to conduct it at all." Again, the China merchant's bank may not want to incur the risk of buying the bill of exchange, even with shipping documents attached, for fear that the New York merchant should on some pretext refuse payment, in which case the China bank, instead of cash to its credit, would have a shipment of merchandise on its hands in New York. Further, the China merchant himself may not know the New York merchant well enough to ship goods and to take the chance of their being refused. Lastly, as the draft would generally reach New York before the shipment, the New York merchant would have to pay for the goods before he actually had them in hand. To overcome these obstacles, it has been for years a custom, in cases where

the New York merchant trusts the China merchant, for the former to get from his New York bankers, who must be a firm of world-wide reputation, a letter addressed to their London agent directing the London banker to accept the sixty-day or ninety-day or four-months bill of exchange of the China merchant, when such bill of exchange is accompanied by bills of lading, insurance policy, consular invoice, etc., in respect of a shipment of merchandise, the nature of which is specified in the letter. This is called a letter of credit, and this letter of credit the New York merchant sends to the China merchant with his order for goods. When the shipment is ready, the China merchant draws his bill on London at ninety days' sight, let us say, and takes it, together with the letter of credit and the shipping documents, to his own bank in China. This bank, on the authority of the New York banker's letter of credit, buys the bill on London at the current rate for such bills. The China bank sends the bill to its London agent, who presents it to the London agent of the New York banker for acceptance; upon acceptance the shipping papers go to the accepting banker, who thereupon sends them to the New York banker. Neither the New York banker nor his London agent has so far paid any cash; they have simply lent their credit. When the goods arrive in New York, the New York banker permits the New York merchant to take possession of them and to deliver them to his customers, from whom he receives payment for them. The New York merchant must pay his New York banker in ample time to permit the latter to remit to his London agent before the bill of exchange falls due in London.

Let us now turn back and follow the fate of the bill of exchange after it has been accepted and handed back to the London agent of the China bank. It is now a bill having ninety days to run, drawn by the China

merchant, accepted by the London agent of the New York banker, and indorsed by the China bank as well as by its London agent — a very substantial commercial instrument. In this form, it is offered for discount to one of the great English discount houses, which pays over to the London agent of the China bank the proceeds, less interest to maturity at the current rate. In anticipation of the discounting of this bill in London, the China bank has drawn a demand bill on its London agent, and so has reimbursed itself for the money paid to the China merchant in buying his bill. The whole transaction has thus been handled by means of credit through the creation of a commercial instrument of high character, in which the London discount house was glad to invest its deposits; these deposits themselves being but credits in another form — but that is another story.

So much for the part played by long bills in our import of commodities. Now for a typical case touching exports. Let us take cotton. For some reason, perhaps because buyer and seller are separated by only a week's trip, and so know each other better, letters of credit are not customary in connection with our exports of cotton. When we export cotton, the China case is practically repeated; a credit is opened, only no letter of credit is actually issued. The English buyer arranges with his banker to accept the drafts of the American cotton dealer and notifies the American dealer to draw his sixty-day bill on the London bank, with shipping documents attached. The American cotton dealer borrows from his local bank to buy cotton from the farmer, whom he pays in cash; when he has gathered enough cotton for a shipment, he ships on, through bills of lading, from his Southern home direct to Liverpool; these bills of lading he attaches to his sixty-day draft on London, and the London draft with its documents he attaches to a draft on his New York agent. With this

New York draft he repays the local bank. The New York agent, in turn, sells this sixty-day bill on London to a New York banker, and with the proceeds meets the cotton dealer's draft on him. On the other hand, the exchange banker sends the sixty-day bill to London for discount, and against the proceeds draws a demand bill on London. It is the China case over again.

The London discount houses, bill brokers, and others dealing in acceptances and other commercial instruments can, under regulations and within limitations prescribed by that Bank, at any time rediscount at the Bank of England, at its posted rate, the commercial instruments they hold. German banks can do the same at the Reichsbank, and French banks at the Banque de France. When the volume of such rediscounts increases beyond the limit deemed advisable by the bank, the bank raises its discount rate, with the immediate effect not only of checking rediscounts, which thus involve losses, but with the further effect of making unprofitable the drawing of foreign bankers' long bills, these bills being drawn for the purpose of lending the proceeds in some dearer money market, as explained hereafter. The raising of the bank rate, by its tendency to check the drawing of foreign long bills, reduces the credit balances of foreign bankers, and so tends either to attract gold to London, or else to decrease the chance of its export; but, while thus tending to protect the Bank's gold, it has the incidental effect of penalizing domestic business by its high rates, and as a consequence it is usually resorted to with reluctance.

In London, Paris, and Berlin, and, in fact, at all the foreign centers, the quick assets of banks are to a great extent invested in acceptances having three months or less to run. The volume of capital so invested is enormous; these acceptances are constantly maturing, and the proceeds are constantly being reinvested. Being always in

a state of flux, this capital is ready at a moment's notice to depart for the most remunerative market. These banks regard foreign acceptances as very desirable investments, and are eager to take them when their rates are more remunerative than home rates. For should home rates advance, the possession of maturing foreign bills enables any bank to extend additional assistance to its customers, without calling on other home industries to contract their lines of credit; furthermore, the possession of such bills enables gold to be drawn from abroad, if needed.

When a bank rate is so raised, it has the further effect of increasing the rate of interest charged on securities carried in that market, and this tends to make brokers and dealers pay their indebtedness in the dearer market, and to transfer their loans to a cheaper market. It has the tendency of making all international debtors pay their indebtedness in that market and borrow in cheaper markets. These tendencies all combine to lower rates in the market affected, and to raise them in cheaper money markets. The vast mass of fluid credits at the disposal of the London and Paris markets give these markets their supremacy. American capital has been and is so fully employed in the development of native resources that it is not generally available for investment abroad, and so New York cannot hope for many years to occupy the central position in the financial world. Important New York certainly is, and its importance is growing; the large exports of American grain and cotton give it the capacity at times to dominate other markets by drawing gold, and this makes it at such times a formidable factor; but, until it has acquired a vast fund of fluid capital ready to seek temporary investment in the best-paying market, it will not be a financial arbiter among nations.

The most elusive part of the subject remains to be discussed, viz., bankers' long bills. They constitute, as be-

tween the United States and Europe, the principal medium of equalizing money rates, and, as pointed out by Mr. Paul M. Warburg in his very able pamphlet,[1] they are far too limited in their scope to do justice to our requirements. When English discount rates rise, French bankers buy English acceptances, thereby employing their funds more profitably than at home; their buying tends to lower London rates, and their abstention from the Paris market to raise rates there. Berlin bankers do the same, both in London and in Paris. The bankers of the European money centers are constantly scanning the possibilities of one another's money markets. But they cannot operate thus directly in the New York market, because we have not created a commercial instrument responsive to their demand. Where we in the United States allow debts between merchants to stand as open accounts, debtor merchants abroad furnish their creditors with bank acceptances, and these the creditor discounts through his bank. Our failure to provide such a commercial tool makes it impossible for foreign banks to invest here in bills bearing the number of responsible commercial and banking names to which they are accustomed, and so our ability to attract for temporary use the funds of other markets is limited to the long bills of such of our banks and bankers as do a foreign exchange business.

If the rate of discount in London is three per cent, and if a New York banker can draw a sixty-day bill on his London agent and sell it in New York at a price based on the London discount, the drawer's profit or loss in the transaction will depend on two factors: first, on the rate of interest at which he can employ the proceeds in New York, and, secondly, on the rate of exchange that he will have to pay for demand bills sixty days hence, for then he must meet his maturing long bill in London. If money here

[1] *Defects and Needs of our Banking System*, by Paul M. Warburg, 1907.

can be invested for those sixty days at four per cent per annum, he will have a margin of interest at the rate of one per cent per annum for sixty days, or one-sixth of one per cent, out of which to pay his London commissions, to meet any loss of exchange, and to find his profit. If, when his sixty-day bill matures, demand bills on London are again selling at the same rate as when he drew the bill, his profit will be one-sixth of one per cent less his London commissions. If the exchange rate is then lower, he will make an additional profit; if higher, he may make no profit — he may even face a loss. If the general level of exchange is high when he draws his bill, he will be more likely to make a profit on exchange, and will therefore be content with a smaller interest profit, while, with exchange very high, he may be content with no interest profit at all, relying on the exchange profit alone. So, too, the season of the year when his long bill matures will influence him; other things being equal, exchange is likely to be lower in the autumn, when our exports reach their maximum, and higher at the end of the year, when interest remittances are to be made. In reliance on, or rather in anticipation of, these seasonal fluctuations, bankers are apt in July and August to draw long bills, so that these may mature about the time when cotton and grain bills come into the market, hoping to cover at a profit by purchasing the export bills.

The requirements of bankers, seeking to cover these summer-drawn bills, provide a good market for exporters' bills. During last summer, however, London houses, mistrusting the state of American credit, discriminated against American bankers' bills, and as a result comparatively few were outstanding last autumn. This circumstance led to a situation containing perhaps certain elements of retribution. The exchange market had adjusted itself to these new conditions before autumn. At

that time grain and cotton bills began to come forward in great quantity, for Europe's harvests had been scant, and our produce was needed there. With little demand from bankers to meet maturing long bills, the importation of a large amount of gold was inevitable, and this import movement gained added impetus from the very considerable purchases of our securities by Europeans at panic prices. In other words, by discriminating against American bills during the summer, the London financial houses had put out of action the automatic governor that tends to hold things even, with the result that in the autumn they were entirely defenseless against our large demands for gold.

But to return to bankers' long bills. Such bills when sold here are bought by other bankers who happen to need remittances, for, when these bills have been discounted in London, they are cash and answer the same purpose as demand bills. Involving, as they do, however, a slight risk for sixty days, they sell an infinitesimal fraction lower than a precise calculation of the discount would warrant, and are to that extent a more economical remittance. Bankers buy such bills to cover the demand drafts they have sold to their customers. The same banker may therefore be buying long bills to cover his own demand bills, and at the same time be selling long bills in order to lend out the proceeds. It was by means of long bills that, in 1895, gold exports from New York, when they had reached a menacing point, were checked by a syndicate headed by J. P. Morgan and Company. This syndicate comprised all the leading drawers of foreign exchange, and the purpose of its formation was to create a sufficient volume of exchange by drawing of long bills (whether at a profit or at a loss) to prevent further exports of gold. It was successful in accomplishing this purpose.

Bearing in mind, then, that the general level of exchange rates will in part determine the decision of the banker in

drawing long bills, we are prepared to understand the automatic operation by which economy of gold movement is secured, through postponing exports or imports until conditions make them imperatively necessary.

Should exchange rates rise very high and approach the export point at a time when money rates here are higher than they are abroad, we should have at work two causes tending to create additional bills of exchange, and so, by keeping down exchange rates, to postpone the export of gold. These causes are the high money rate and the high exchange rate, both, as explained, strong inducements for drawing long bills. When interest rates in the two markets are about equal, the interest motive is inoperative, and only the exchange motive for drawing long bills exists; the effect of that alone, though of less force, would again be to retard exports.

With gold imports, we see corresponding forces at work. To make gold import probable, exchange must be low; under those circumstances there is little inducement to draw long bills, unless money rates here are very high indeed. To the extent that they are drawn, however, they facilitate imports by forcing down exchange, and so hasten the journey of gold to the dearer money market; but this occurs only when the money market is in great need. On the other hand, when, with low exchange rates, money rates are also low, bankers will hold commercial long bills without discounting them abroad, and without drawing against the proceeds, not only because the higher foreign interest rate, on the basis of which the bills are bought, is more remunerative, but also because there is the chance of selling the exchange at higher rates later. When exchange is so held without discounting or drawing against it, it is virtually taken out of the market, thus raising exchange rates and deferring imports.

So once more we see the trader's eager quest for a profit,

regulating, automatically, financial adjustments that paternal oversight by government might bungle, but could, in no event, improve.

Some of the great foreign banks, notably the Bank of France, seek at times to stimulate the import of gold into their market by lending to private banks, without interest, the cash needed for the operation. Leslie M. Shaw, when Secretary of the Treasury, made similar loans to national banks here, returnable on receipt of the imported gold from abroad. Secretary Shaw did this at a time when exchange had fallen to a point at which importations would have been possible, had interest rates been at six per cent; interest, however, was much higher than six per cent, and so no gold was being imported. Interest may be regarded as the friction of commercial machinery, and in the case in question the friction was so great that the gold-importing machinery needed unusual power to start it. The secretary overcame the friction. This action of Secretary Shaw has been much discussed, and different views in regard to it are entertained. Certainly greater justification for such action existed than often exists when the Bank of France takes similar action. The sufferers from failure to import gold promptly had been our exporters, who, by reason of the unusually low level of exchange rates, had been receiving low rates for the export bills they had for sale, though they probably succeeded in shifting a part of this load to the shoulders of foreign buyers. In connection with this action of the secretary, two questions provoke discussion: first, whether or not the gold imported in this frictionless manner would have come to us in any event. Critics of the secretary believe that exchange would have continued to drop, and that in the end the gold would have come. The advocates of automatic adjustment must, however, recognize that, like all markets, the exchange market is ever in motion; at every

point it is subject to a multitude of tendencies of ever varying force. If it advances a point, new supplies may be attracted and a part of the existing demand may be withdrawn; if it declines, the reverse may take place: at every moment new elements of supply and demand enter, and if gold is not imported to-day, to-morrow the occasion and the need of it may have passed. On the other hand, if it is once known that the gold import point has been permanently raised, these forces will inevitably assume new relations to the market. When these new relations are once definitely established, we shall probably import no larger amounts of gold than we would have done under the old conditions. The gold imported under Secretary Shaw's offer might not have come to us without his aid; but, if his aid was really instrumental in drawing it here, it was because, the offer being unexpected, the market had not sufficient time to adjust itself to the new conditions, and being of uncertain duration, it was impossible to operate for the future in reliance upon their continuance.

Secondly, having thus imported, by the frictionless method, gold that we will assume we would not otherwise have secured, does it follow that we shall for that reason reëxport it? By no means. The exchange market, when it draws away from the gold import point, does not shoot up to the export point; it runs the gauntlet of a thousand tendencies that buffet it up and down, and it may not reach the export point for many months. It is like the valves that we see on water tanks: when the water falls below a certain level, the pump is started automatically, and when the water rises to another level, the pump is automatically cut out. Between its cutting in and cutting out, the water may be drawn quite low and then again be raised by rain or otherwise, and then drawn down again; but no matter how near the water may get to either limit,

provided it does not reach that limit, many causes may interfere to postpone its setting the pump in motion.

I can see no objection, practical or theoretical, to the frictionless movement of gold. Whatever feeling it evoked abroad would vanish, if it were understood, once for all, that this would be our usual custom. By establishing this custom, we should somewhat narrow the extreme range of exchange fluctuations; but this in itself would be an advantage. The purpose could be easily accomplished by permitting banks to count as part of their reserve gold actually in transit: it is immaterial whether that gold be in the banks' vaults or only on its way there. Rarely will any bank be so hard pressed that it cannot spare a portion of its reserve for a week or two, knowing that it will be received at the end of that time, and, moreover, a bank so situated that it could not spare the cash from its reserves would not attempt to import gold. The one real risk would be loss in transit, and that risk being protected by insurance, the only risk would be of delay.

This automatic import and export of gold furnish to the currency of every country a very considerable element of automatic elasticity. France and Germany have other elements of elasticity arising from the note issues of their government banks; but gold movement is the only element of elasticity in the currency of Great Britain, Bank of England notes being merely certificates of deposit for sovereigns held on storage, except the fixed amount of £18,450,000, uncovered notes.

Our currency is, therefore, more elastic than that of Great Britain, for we have the elasticity imparted by our national bank-notes — a sluggish, inert elasticity — the elasticity of an old rubber band; such bands, like our national bank-note circulation, will expand a certain limited distance, but neither the old rubber bands nor our bank-note circulation will contract. Of course, with a vast

country and huge crops raised in remote sections, our currency requirements are entirely different from those of Great Britain. Beyond question our currency machinery should be remodeled and improved; but recognition of the need of change has, to many, come so recently and so suddenly that we are, at the present time, in greater danger from hasty and unmatured action than we have hitherto been from failure to act. We need action, enlightened action; but, in order to secure it, we need, first, a thorough understanding of the requirements. That topic in its details is beyond the province of this paper; but a word on the subject is proper here, because consideration of the nature of those requirements follows logically on the discussion of elasticity as imparted by gold movements. We need elasticity, in addition to that imparted by the import and export of gold, in order that the periodical, temporary, hand-to-hand currency requirements of crop-moving and holiday seasons may be met without disturbing credit lines; but this elasticity must be so planned that it cannot be used, except perhaps in times of great emergency, for the purpose of erecting a larger credit structure upon our cash reserves. It is my opinion that these requirements can best be met by a central bank properly organized and administered, and I believe that a form of organization can be devised for such a bank that will effectually protect it from the danger of political control or influence.

High interest rates, like high temperatures in the human body, are symptoms of disease, and when they show themselves, we must seek to cure the disease, not doctor the symptoms. Except when caused by need of currency for hand-to-hand purposes, high interest rates indicate an overextension of credit that calls for contraction and liquidation, and in former days they brought about that contraction and liquidation. During the last few years, how-

ever, high interest rates have failed to do this, because the business community has come to rely more and more upon Washington intervention to keep interest rates down. Accordingly, in the belief that such rates would prevail for but a short period, business men have been willing to pay rates that a few years ago would have brought about prompt liquidation, and with it, relief. Under our present awkward currency arrangements, it is perfectly proper that the Treasury Department should in slack seasons gather in surplus currency, in order to place it again in circulation at crop-moving seasons, and that it should at other times redeposit surplus revenues with banks, so as not to cause unnatural contraction. But this necessary Treasury action has accustomed us to look to Washington for relief from high money rates, however caused, with the result that high rates have for the last few years lost their terrors, and have failed to bring about needed liquidation. In remodeling our currency, we must devise a system which provides for the currency requirements of crop-moving seasons without liquidation of credit lines, and which keeps Treasury money in the channels of trade, thus taking away the power of the Treasury over interest rates. When that shall have been brought about, interest rates will once more have become a valuable indication of credit conditions, and the business community will again heed their timely warnings.

THE NEW YORK CLEARING HOUSE

BY

WILLIAM A. NASH

THE NEW YORK CLEARING HOUSE

Words of Introduction, as Presiding Officer

I appreciate very highly the honor of presiding over this meeting, as it gives me an opportunity to make some personal references to the Clearing House of this city and a few brief comments upon some phases of the present state of affairs.

I feel I can speak more freely to this audience, as through the suggestions of your former President Low, the bank with which I am connected, and in which a large number of the students of Columbia are depositors, opened its University Branch very near here. If through that agency I have in any way assisted in the work of education by impressing upon those young men the value of accuracy and the wisdom of a strong cash reserve as leading principles of commercial morality, I hope I shall not have been unworthy of being named among your most useful professors and educators.

It is very easy to understand the keen public interest in all that relates to clearing houses and especially the great one in New York City. Money and credit are two great interests that come home to our business and bosoms, and the men who handle them, in distinction from those who talk about them, are the subjects of natural curiosity.

As an organization of power and influence in financial matters, I know of none that excels or equals the New York Clearing House. It has its usual daily duty of making the practical exchanges between the banks, by which

your check arrives for payment in an incredibly and sometimes uncomfortably short space of time, and it has its occasional function as the conservator of business interests and the potent agency by which panics are stayed and the baleful effects of public excitement are arrested and regulated. Nine times in its history the Clearing House has come to the rescue of the business community and the public at large by the issue of loan certificates, a remedy now so well understood that its aid is eagerly clamored for at these times of emergency. These loan certificates constitute the only experiment in asset and emergency currency that this country has ever had. In the half century of its existence this method of help has, as I have said, been used nine times, and without the loss of a single dollar. I have no doubt that the present issue will have the same happy solution. I had the honor recently to say in public that the pointings of the loan certificates now in existence all over the country wherever there are clearing houses were unerringly to a great central bank.

Without enlarging on this idea at this time, I want to emphasize one phase of such a central bank that is absolutely necessary for its success. I refer to the character of its management. I contend that only the men who are experts in banking should dominate and control such an institution. I draw the idea from my experience with the men who have so brilliantly served the public in the New York Clearing House, and with whose grand and unselfish work I have been familiar all my business life.

The Clearing House Committee is composed of five bank officers and the president of the Association. The best bankers of New York have been selected for membership on this committee.

The Clearing House Committee man to be successful must be a practical banker, of broad and enlightened

sympathies, of courage and unselfishness, and with promptness and decision to meet unexpected and unusual conditions. These conditions arise no more suddenly and in no more perplexing forms than in financial matters in a time of panic and disturbance. The emergency is very often dramatic and intense, and I do not wonder at the curiosity and interest that centers around the Committee in exigencies similar to that through which we have just passed. I have been filled with admiration at the foresight, the discretion, and the boldness of these giants of finance, in the several crises where their decisions and judgments have had far-reaching results. The public confidence in this Committee has never been impaired. I should like to point to some of the men who are honored and cherished for their services in the Clearing House. I recall the magnetic George S. Coe, one of the most resourceful of thinkers; Jacob D. Vermilye, for many years the Nestor of our banking fraternity; George G. Williams, of the Chemical Bank; Edward N. Perkins, of the Importers & Traders' Bank; Henry W. Cannon, of the Chase, and later his successor in that office, A. Barton Hepburn; J. Edward Simmons, of the Fourth National Bank; Dumont Clarke, of the American Exchange; James T. Woodward, of the Hanover; and Alexander Gilbert, of the Market and Fulton, now president of the Association. I might enlarge the list very greatly, but the thoughts of every banker turn to one man, who during a long term of years rendered the most brilliant and useful services to the banking world and who centered in himself all the admirable traits imaginable in a master of finance. I refer to the late Frederick D. Tappen, whose name has been on our lips many times during the past months. Genial, magnetic, courageous, bold, courteous, and discerning, he was for years the controlling power in financial circles. He was not the president of a large bank, nor a

man of great wealth, but held his control of affairs by the force of his individuality, his personal character, and experience as a banker. The prominence and power of Mr. Tappen illustrates the leading principle of Clearing House control. It is not held by large banks but by large men. Often the president of a small bank has been the most influential in our councils, and the character and force of the man have always counted more than the size of his bank.

When the present financial crisis broke upon us, it was instantly felt that the growth of our banking interests demanded a larger force for the management than on previous occasions, and the Loan Committee, which was the Clearing House Committee, was authorized to associate five other bank officers to assist them. It gave a fine opportunity of initiating the younger bank officers into the working force of the Clearing House, and the result of the experiment has been to add to our available men — always too small — these rising men in our profession. The Chairman of that Associated Committee is the speaker of the afternoon. He is not only practically conversant with Clearing House work, but his book on clearing houses is a standard work on the subject. The Clearing House Committee is under great obligations to the committee over which he has presided so ably. I have the pleasure of presenting to you Mr. James G. Cannon, Vice-President of the Fourth National Bank of New York.

CLEARING HOUSES AND THE CURRENCY

BY

JAMES G. CANNON

CLEARING HOUSES AND THE CURRENCY

The Supreme Court of one of our states has defined a Clearing House as "an ingenious device to simplify and facilitate the work of the banks in reaching an adjustment and payment of the daily balances due to and from each other at one time and in one place on each day." In practical operation, it is a place where all the representatives of the banks in a given city meet, and under the supervision of a competent committee or officer, selected by the associated banks, settle their accounts with each other, and make or receive payment of balances, and so "clear" the transactions of the day for which the settlement is made.

But we must go farther than this, for though originally designed as a labor-saving device, the Clearing House has expanded far beyond those limits, until it has become a medium for united action among the banks in ways that did not exist even in the imagination of those who were instrumental in its inception. A Clearing House, therefore, may be defined as a device to simplify and facilitate the daily exchanges of items and settlements of balances among the banks, and a medium for united action upon all questions affecting their mutual welfare.

The clearing houses in the United States may be divided into two classes, the sole function of the first of which consists in clearing notes, drafts, checks, bills of exchange, and whatever else may be agreed upon; and the second of which, in addition to exercising the functions of the class just mentioned, prescribes rules and regulations for the control of its members in various matters, such as

fixing uniform rates of exchange, interest charges, collections, etc.

Clearing houses may also be divided into two classes with reference to the funds used in settlement of balances: first, those clearing houses which make their settlement of balances entirely on a cash basis, or, as stated in the decision of the Supreme Court above referred to, "by such form of acknowledgment or certificate as the associated banks may agree to use in their dealings with each other as the equivalent or representative of cash"; and second, those clearing houses that make their settlements by checks or drafts on large financial centers.

The primary object of a Clearing House is, as stated, the exchange of checks and drafts between the banks associated together for that purpose, and the settlement of balances resulting from such exchanges; but this is not the only function exercised. As already shown, this single function constitutes a Clearing House of the first class, while the addition of other functions puts the organization into another class. The tendency has been marked, especially in recent years, to include within the legitimate field of clearing houses all questions affecting the mutual welfare of the banks and the community as a whole. The bankers west of the Mississippi have given to the country the most striking examples of the possibilities of clearing houses exercising various special functions, while the great associations of the East, and especially that of New York, have exemplified the utility and value of Clearing House loan certificates.

The most important of the special functions of a Clearing House are: (*a*) the extending of loans to the government, (*b*) mutual assistance of the members, (*c*) fixing uniform rates of interest on deposits, (*d*) fixing uniform rates of exchange and of charges on collections, (*e*) the issue of Clearing House loan certificates.

Less than a decade after the inauguration of the Clearing House system in America, the Civil War broke out and threw the government into a condition of acute financial embarrassment. The ordinary sources of income were insufficient to meet the demands of the approaching crisis. Thereupon the banks, members of the clearing houses in New York and Boston, responded with practical unanimity to the call of the government for loans, by which the latter was enabled to put armies in the field and to maintain the struggle for national unity.

In times of panic, it is not infrequently the case that a bank in good standing becomes temporarily embarrassed. Unfortunate report may cause a run upon it, and, being unable to call in a sufficient amount of its outstanding loans to meet the demands of its frightened depositors, it must either secure a loan or fail. In such an emergency, the other members of the Clearing House are usually willing to render assistance until the strain is relaxed. To secure such aid, however, a bank must be sound in its management and of good repute in every respect; otherwise, the members of the Clearing House are likely to decline assistance, being quite willing to get rid of a weak and ill-managed member.

Another of the special functions of a Clearing House is the fixing of uniform rates of interest on deposits. In some associations the legality of such action is still regarded as a moot question, and hence they are reluctant to enforce such a rule. Other associations have not hesitated, however, to regulate their members on this point. As early as 1881, the rates of interest were agreed upon in Buffalo, and were observed practically without fraction or violation, for some nine years thereafter. They were broken at last only because of their non-observance by new banks, which at the outset refused to become members of the Clearing House organization.

Still another of the special functions which I have mentioned is the fixing of uniform rates of exchange and of charges on the collection of items. In 1881, also in Buffalo, a prominent banker in that city succeeded in uniting the banks on rates. The promoter of the enterprise, though well known for rate-cutting, was a successful banker, and had always been able to meet competition successfully. Hence, when he proposed a uniform rate system, the other banks were only too glad to consider his propositions. The rates were not high, but were arranged so as to do justice, so far as possible, to the banks on the one hand and the depositors on the other, and so satisfactory was the new régime that it remained in harmonious operation for nearly nine years. As was the case with the agreement fixing the uniform rates of interest on deposits, the non-observance of the collection exchange rules by the new banks made its continuance an injustice to the member banks.

The matter of collecting checks and other items outside of the city of New York is a subject that for many years had received most careful thought on the part of the officers and members of the New York Clearing House. An amendment to the constitution was adopted March 13, 1899, directly bearing upon this point and embodying a policy that was so radical as not only to attract attention throughout the entire financial community, but at the outset to incite more or less opposition. As time has passed, however, the justness of the provisions has become apparent, and the business community has acquiesced in what is manifestly an entirely reasonable measure. The clearing houses of Boston and Chicago have since put rules of this character in force. Briefly, its important provisions are as follows: after naming certain of the larger cities in the East as points upon which it is optional as to whether the banks make a charge for collecting

items, it specifies certain states, mostly east of the Mississippi, and including Virginia and West Virginia on the south, upon which a charge of not less than one-tenth of one per cent must be made by the collecting bank, and upon all other states in the Union, and for items upon Canada, the collecting banks shall charge not less than one-quarter of one per cent of the amount of the items, respectively. The amendment also provides penalties for the violation of its provisions, the penalty for the first violation being a five-thousand-dollar fine, and in case of a second violation, any collecting bank may be expelled from the association.

The daily routine of the New York Clearing House is as follows: each business day, at ten o'clock, the exchanges take place between the banks. The two essential representatives of each bank are the "delivery clerk" and the "settling clerk." The former delivers the packages brought, and the latter receives the return packages from the messengers of the other banks.

Each member sends its items for the other banks made out separately and inclosed in envelopes, with the amounts listed on the "exchange slip" attached to the outside. On their arrival at the Clearing House, the settling clerks furnish the proof clerk, sitting at his desk in the manager's gallery, with the "first ticket," upon which is entered the amount brought or "credit exchange," and which the latter transcribes on the Clearing House proof under the head of "Banks Cr." The total of the amounts thus brought by the several clerks constitutes the right-hand main column of that sheet.

The bank representatives usually gather at about a quarter to ten, and a few minutes later the manager appears in his gallery. At one minute before ten he sounds a gong as a signal for each of the clerks to station himself in his proper place. Each bank's settling clerk has his

own desk, back of which he stands, while the delivery clerks form on the outside with their exchanges carried in a box. The delivery clerks arrange themselves in consecutive order, and stand ready for delivery as they pass along the counter. They carry with them "delivery clerk's receipts," or little slips containing the amounts for each bank arranged in order, upon which the several settling clerks, or their assistants, give receipts for the packages delivered.

All are now in a position for the exchange. The manager calls "ready," and promptly at ten o'clock he sounds the gong again and the delivery of the packages begins. He looks down four columns of men, moving simultaneously like a military company. At the start each advances to the desk in front where his first delivery is to be made. He deposits the package of items and also the receipt slip, on which the assistant of the settling clerk (or in the case of small banks the settling clerk himself) writes his initials opposite the amount of the package delivered in the blank space provided for that purpose. At the same time, in an opening in the desk, which serves for that purpose, he deposits a small ticket containing the amount of the package. If correct, it must agree with the amount listed on the "exchange slip." This process is repeated at the desk of each of the banks, each delivery clerk making the complete circuit in ten minutes to the point from which he started.

Being now at liberty, each delivery clerk takes back to his bank the exchanges deposited by the other messengers, while the settling clerks remain until the proof is made.

The settling clerks, immediately upon the completion of the exchange of packages, sum up, as quickly as possible, the amounts entered on their statements under the head of "Banks Dr." Upon ascertaining the total, they make out another ticket containing the credit and debit ex-

changes and the balance, and send the same to the "proof clerk," who transcribes the debit exchange under the head of "Banks Dr." (the credit exchange having already been entered) and the balance on the credit side or debit side, as the case may be.

While this is being done, the settling clerks are checking back from the small tickets, to ascertain whether the amounts agree with the amounts listed on their statements from the exchange slips. By this time the proof clerk has footed the four columns on his sheet, viz., the credit and debit exchanges and the credit and debit balances. If the former two agree with the latter two, the work is correct, and the result is announced by the manager, who then calls off credits and debits.

Thus far no money has entered into the transaction. Checks, notes, drafts, and other items have passed through the exchanges, but as yet no occasion has arisen for the use of a single penny. Evidently, however, the clearing is not yet complete. Each member has in its possession paper drawn upon itself which the other members have credited on their books, and likewise each member has given in exchange to each of the other members paper drawn upon them respectively and which it has credited upon its own books. But the possibility is very remote that the amounts of the items delivered by any member to the other banks will exactly balance the sum total received from them. Indeed, so slight is the chance of such an agreement, that in the whole history of the Association there has not been a single instance of this kind, although the approach on one occasion was within one cent of an exact exchange. Hence, each day after the exchange, the general proof will show a debit on the part of some banks and a corresponding credit on the part of others. To complete the clearings, therefore, it is necessary for the banks to settle these balances.

Accordingly, before half-past one o'clock, each debtor bank, in compliance with the requirement of the constitution, pays into the Clearing House the amount of its debtor balance, and obtains a receipt for the same, signed by the assistant manager. After half-past one, the creditor banks receive at the Clearing House their respective balances, and give their receipt for the same in a book provided for that purpose; but in no case can a creditor bank receive its balance until all the debtor banks have paid in.

With the exception of fractional amounts, balances are settled with legal-tender notes, gold coin, United States and Clearing House gold certificates, and during panic times with Clearing House loan certificates.

By resolution and amendment, covering nearly the whole period of its history, the New York Clearing House Association has been developing the present system for regulating the conduct of those outside, or non-member institutions, which enjoy the privileges of the Clearing House. No other Association in the United States even approximates that of New York in the rigorous conditions it imposes upon non-member banks, and in the consequent safeguards it has thrown around its members. This subject of members clearing for outside institutions is one that is just now receiving a great deal of attention from the Clearing House authorities. A member bank, being responsible to the Association for the clearances of a non-member bank for at least twenty-four hours after notice of ceasing to clear has been given, it has always been customary for the clearing bank to take securities from the non-member institution for which it clears, to provide against the contingency of loss; but on account of complications arising from the failure of one or two state institutions, where large blocks of the most desirable assets were found to be in the possession of the clearing

bank, to cover their clearances, a law was passed by the Legislature, called the Saxe Bill, which states in brief that the effect of the statute is to forbid the enforcement of any lien against the moneys or securities so deposited for any clearances made after notice or knowledge that the banking superintendent has taken possession of a non-member institution. Hereafter, therefore, the former validity of a lien of this character is absolutely annulled, so far as respects the assets of a state bank or individual banker. It appears, however, that where such clearing is made for a trust company non-member, this statute will not apply, since the words used are merely state bank or individual banker, and since section 2 of the banking law does not include a trust company in its definition of the terms "bank" or "individual banker."

This makes it extremely dangerous for bank members of the Association to clear for non-member banks, organized under the laws of the state of New York, and this statute might some day be construed by the courts to apply also to the trust companies. This is one of the things that has helped the agitation for the admission of the trust companies to the privileges of the Clearing House, and at a meeting of the Association, held on January 13, 1908, a resolution was adopted authorizing the admission of trust companies to full membership in the Clearing House, provided they will keep a reserve in cash equal to twenty-five per cent of their deposits. Full membership carries with it, besides the privilege of clearing checks, etc., direct, the right of having representatives on committees, a voice in the entire management of the Association, and the privilege of taking out Clearing House loan certificates when they are authorized. At the same meeting an amendment was offered, but laid over for three months, providing for a new class of members in the Association, to be known as associate members. Such

members would have all the privileges and benefits of the Clearing House, except a voice in its management, and would be obliged to keep a reserve on their deposits of only fifteen per cent.

Until January 16, 1908, there was nothing in the constitution of the New York Clearing House requiring its members to keep a cash reserve. The twenty-five per cent reserve which is so often spoken of in connection with the bank statement was kept by the banks without any law of the Clearing House. At a meeting of the Association, held on January 16th, an amendment to the constitution was adopted, requiring that thereafter all members of the Association, or those who should thereafter become members, should maintain in their vaults a cash reserve of twenty-five per cent of their deposits. By compelling all of its members to keep a twenty-five per cent reserve, and by making this reserve a condition to the admission to the privileges of the Clearing House, of trust companies as well as banks, the general banking situation in this city will be greatly strengthened.

By the admission of the trust companies to full or associate membership in the Clearing House, the bank statement, which is published every Saturday, will be much more comprehensive than ever before, because it will henceforth include nearly all the financial institutions in the city.

There is much to be said on this subject of the bank statement. As before stated, it is the custom in New York City to publish the details of the banks' standing each Saturday noon, and in many instances, because of this incompleteness, I believe it is a disturbing factor. Boston and Philadelphia also publish their bank statements in detail, but Chicago has never done more than give the totals to the public. Many people find fault with the bank statement because it is made up of averages; but

if they would only stop to consider, they would readily see that that is the only way a statement could be made up that would not be a disturbing factor to the financial situation. If a statement was published of the condition of each bank in the Clearing House as it stood at the close of business on Friday afternoons, it would necessitate the very heavy calling of loans on Thursday and Friday preparatory to such a statement, and Saturday, being a half holiday, the banks would be obliged to carry very large sums of money over the week end; in fact, the whole business of banking would be disarranged, and money would always be easier at the beginning of the week than at the end. With the present system of averages, if through some combination of circumstances a bank swings under its required reserve in the beginning of the week, it knows that by calling a few loans each day it has several days in which to readjust itself, and in that way secure a more or less satisfactory average for the week. I, therefore, believe that a bank statement based upon averages is the only one to be given to the public. As a guide, however, to the Clearing House authorities, but not for publication, possibly a statement showing the actual condition of the banks at the close of business on Friday might be of great assistance as indicating whether the statement had been made up on rising or falling averages.

We come finally to the subject of Clearing House loan certificates, which has been receiving much attention of late, and which deserves especial mention.

Clearing House loan certificates may be defined as temporary loans made by the banks associated together as a Clearing House Association, to the members thereof, for the purpose of settling Clearing House balances.

To obtain an intelligent understanding of the real character and purpose of such certificates, it will be well

to consider for a moment the circumstances under which they are issued. In the course of the last hundred years, the United States has undergone periodical derangements of business affairs, when confidence was displaced by mistrust, when the payment of debts became difficult, when property values declined and business houses failed, when industry and trade were paralyzed and general stagnation ensued in all lines of enterprise. In such times, depositors in banks, stricken with fear and sometimes pressed with need, drew out their deposits, in many instances to such an extent as to render it difficult or even impossible for the banks to contract their loans sufficiently to meet the demands thus made upon them. Under our present currency system there is no method of expanding the money volume as occasion demands, whereby the banks can continue their usual loans and discounts and thus prevent a panic, with all its evil consequences. Hence it is left in a large measure to the financiers of each community to work out their own remedy, supplemented by such mutual assistance as a courteous regard for each other may dictate, or as business relations may demand.

Quick to see the deficiency in our currency system, and the desirability of in some way supplying it, the bankers of New York, over forty years ago, devised the scheme of issuing Clearing House loan certificates as a method of relief from monetary stringencies. Subsequently, nearly all the clearing houses in the great centers adopted the same device, and by their heroic resort to the measure, they have at different times relieved the community of untold disaster, for which invaluable service they have justly received the grateful recognition of the entire country.

The great value of Clearing House loan certificates consists in the fact that they take the place of money in settlements at the Clearing House, and hence save the use

of so much actual cash, leaving the amount to be used by the banks in making loans and discounts and in meeting other obligations. The volume of currency, to all intents and purposes, is expanded by this means to the full amount of the certificates issued.

The loan certificates are taken out by the Clearing House members through loan committees especially appointed, and are used, as a rule, only in the payment of balances among the associated banks. Thus, when the stringency in the money market seems sufficient to demand it, the Clearing House Association meets and appoints a committee, called the loan committee, consisting usually of five bank officers, to act in concurrence with the president of the Clearing House Association, who serves as *ex-officio* member. It is the duty of such committee to meet each morning at the Clearing House and examine the collateral offered as security by the banks, and to issue loan certificates thereon in such denominations and proportions to collaterals deposited as may be agreed upon. In the history of the past, the denominations have varied from twenty-five cents to twenty thousand dollars in the different associations, and in proportion varying from fifty dollars to one hundred dollars of certificates to one hundred dollars of collateral deposited.

These loan certificates bear interest at rates varying from six to nine per cent per annum, payable by the banks to which they are issued to the banks receiving such certificates in settlement of daily balances. Hence the interest charged against certain banks must exactly equal and offset that credited to certain other banks. The aim is to fix the rate sufficiently high to insure the retirement of the certificates as soon as the emergency which called them forth has passed by. As a rule they are retired by the banks which take them out as soon

as they have obtained sufficient cash to meet their daily obligations. Notice is given by the debtor banks to the committee calling for such certificates as they wish to retire, and the committee gives notice to the banks holding the same, stating that the interest will cease after a specified date. In due course, the holders send the certificates through the Clearing House for redemption. Upon the retirement of the certificates, the collateral deposited as security is surrendered by the committee in the same proportion to certificates surrendered as was required for deposit.

The first issue of Clearing House loan certificates was made in 1860, and the last is still outstanding. These certificates have been more extensively and generally used in the panic of 1907 than in any previous panic, and there has been developed a tendency to use them, in the smaller denominations, as a circulating medium throughout the country, to take the place of currency that has been withdrawn from circulation; and I believe that one of the most potent factors in stopping the force of the recent panic was the issue of these Clearing House loan certificates by the clearing houses throughout the country.

Owing to a popular misconception of the character and purpose of these loan certificates, much adverse criticism has been indulged in, especially in 1893, on the ground that such issues were made in violation of the ten per cent prohibitive tax on bank-note currency, other than national-bank note circulation. Such objections were based on the assumption that Clearing House loan certificates were a form of national bank currency — an assumption which is ill founded in both theory and fact. The certificates were and are essentially temporary loans made by the banks banded together as a Clearing House Association to the members of such Association,

and were available to such banks only for the purpose of settling balances due from and to each other. In the words of the Comptroller of the Currency, they are but due bills, and their sole function consists in discharging obligations at the Clearing House. In New York an attempt on the part of a Clearing House bank to use them otherwise would insure a fine and other penalties provided in the rules governing the Association. The courts have decided that they shall not be regarded as money, and the imposition of a tax upon them, therefore, would be a serious blow to one of the most effective and ingenious contrivances for the delivery of the country from the throes of panic that has yet been devised.

In reading the newspaper discussions in connection with the so-called Aldrich Currency Bill, which is now before Congress, I notice that it has been suggested that the issuance of Clearing House loan certificates should be prohibited by law. It does not seem possible that any student of finance who is familiar with the uses of these certificates could, for one moment, make such a recommendation. Had it not been for the issuance of Clearing House loan certificates by the associated banks of New York during the recent crisis, we should not have been able to import any considerable amount of gold from Europe. Very few people realize that in importing gold it is necessary to create a credit on the books of a bank, upon which the gold importer may draw, through the Clearing House, in payment of the cable transfers and bills of exchange necessary to cover the amount of gold to be brought over. Clearing House loan certificates enabled the banks to make these credits, and that is the reason we were able to import such a large volume of gold during the past few months. The banks extended their facilities to the importers, who brought over the gold on "trust receipts," which were deposited with the banks

as collateral security, pending the arrival of the gold. These issues of Clearing House loan certificates also provided credit with which the banks were enabled to buy and pay for large amounts of the Panama bonds and United States certificates of indebtedness which were issued by the government as a measure of relief. The bonds and certificates so purchased were then placed on deposit in Washington, as security for new national-bank note circulation. Under the present laws, and according to the provisions of the Aldrich Bill, so called, it is imperative that the banks should first buy bonds, send them on to Washington, and wait for its preparation before they can receive the new circulation. The credit to purchase these bonds, in times of panic, must be obtained in some way, as there would be no sense in paying out reserve money to buy bonds for circulation, and receive no return on the same for a week or ten days, and then only in national-bank notes which cannot be counted as reserve. The custom has grown up of late of national banks borrowing bonds, which they have deposited with the Treasurer of the United States as security for government deposits, and for the purpose of releasing government bonds for circulation. I do not believe that the National Bank Act ever contemplated anything of the kind, and I think it is one of the outgrowths of our present financial system. It was, however, absolutely necessary to issue Clearing House loan certificates to enable the banks to purchase United States bonds, and thus secure additional circulation.

It was also imperative, in the panic through which we have just passed, to issue Clearing House loan certificates to save the trust company situation. The trust companies, having no Clearing House of their own, were compelled by the very nature of things to ask the Clearing House Association to assist them in saving the situation,

by the issue of Clearing House loan certificates to enable them to liquidate the large deposits of the trust companies of which they were taking care. The methods pursued by the committee in charge of the trust companies was to place certain collateral, which had been deposited with it, in the hands of the trust companies which had subscribed to the fund for upholding those that were in trouble. Such of the companies as desired to do so made their own notes, and with the collateral received from the committee, borrowed from the Clearing House banks with which they did business the amount necessary to meet their subscription to the trust company "pool," at the same time giving authority to the banks to hypothecate their note and collateral with the New York Clearing House Association, and receive Clearing House loan certificates for the same. Had it not been that the New York banks were able to take out Clearing House loan certificates in connection with this phase of the matter, a very grave situation would certainly have developed.

It might be well to remember in connection with this matter that the banks themselves also subscribed a very large amount of money to assist the trust company "pool," and if necessary, in order not to interfere with the handling of their regular business and the accommodation of their customers, they could at any time have taken out more Clearing House loan certificates.

These illustrations will show what an important part Clearing House loan certificates played in the panic, and the absolute necessity for their creation and use.

Clearing House loan certificates create an elasticity in the assets of banks. In times of panic what is wanted is assets that are readily convertible, and that will pay depositors as well as permit new loans. In such times banks need expansion in the right direction, and not contraction.

We are just now in the midst of a discussion of the currency problem in this country, and one of the strange things about the matter is that no two persons can exactly agree on the subject. Every one has a "special plan" which he thinks will solve the problem. I am one of a growing number of bankers who believe that in the adaptation of the Clearing House loan certificates we have the solution of the problem. We do not need more fixed currency in this country, but we need flexibility to meet emergencies such as we have been passing through. This class of currency should be retired immediately, as soon as its usefulness is ended.

In times of panic or extremely tight money, banks need two things: something that will enable them to convert their fixed assets into liquid assets without calling upon borrowers for payment, and with these new liquid assets extend further credit to their customers, because in such times the demands of occasional borrowers upon the banks are very great. This is really the purpose of Clearing House loan certificates, as they allow banks to take to the Clearing House their fixed assets and convert them into a medium of exchange between themselves, thus allowing an extension of further credit, which credit is utilized by their depositors through the Clearing House.

Add to this function one more, and you will give us all that is needed to meet any emergency, viz., a currency to take the place of that which is hoarded. The hoarding of money always accompanies panics. Panic always produces fright, not only among the people at large, but among the banks themselves, and if at such a time we could have a safe currency which would fill in the gap temporarily, we should have solved the problem as far as panics are concerned.

The reserve balances of the country banks are, as a rule, kept in the large money centers, and upon these

centers they depend for their excess supply of currency. I would, therefore, have in every large city where there is a subtreasury the Clearing House incorporated, recognized by law, and prepared to do business with the United States government. I would have a "United States Emergency Currency" printed in large quantities and held under proper safeguards in each subtreasury. I would permit the Treasurer of the United States, on proper application, to receive Clearing House loan certificates of the associated banks in any of these cities as collateral security, and advance fifty per cent of the amount of such certificates deposited, in emergency circulation, to such associations. Such circulation should bear six per cent interest, so that it would be retired at once when not needed.

This circulation would cost the banks twelve per cent, as they would be obliged to pay six per cent on the full face value of the Clearing House loan certificates taken out. The Clearing House could make rules and regulations for apportioning this currency among its members, and I would have the "United States Emergency Currency" retired by the deposit of lawful money with the Treasurer of the United States, just as the national-bank note circulation is now retired.

You can have no better security for a circulation of this character than Clearing House loan certificates, issued under proper safeguards and carrying, as they do, the joint guaranty against loss of all the members of the Association. Of course this would mean a change in our laws, and injecting into our currency another kind of money; but it would be secured beyond peradventure. Its retirement would be provided for promptly, and when outstanding in the hands of the public would be covered by ample collaterals or by lawful moneys of the United States, deposited against its retirement.

Such currency must be issued by the United States government to be of value, as the membership of the clearing houses does not consist entirely of national banks, but includes state banks and trust companies; and to be of assistance to the general situation, in times of panic, these institutions must also have the benefit of an emergency circulation, if we desire the stability of all the financial institutions of this country.

I would include in the act of incorporation of the clearing houses a provision that Clearing House loan certificates could be issued at such other times as in the wisdom of the members of the Association they were needed, and thus also provide a flexible currency for crop-moving periods or other money stringencies. An emergency currency of any character whatever must be quickly retired and canceled, and not be permitted to remain outstanding as a further inflation of our already much inflated currency; by providing for its redemption by the deposit of lawful money, you throw around it another safeguard.

A currency of this character would also meet the requirements of the mercantile community. If a merchant borrowed from his bank, say, two hundred thousand dollars, on his single-name paper, the bank could give him credit on its books for that amount less the discount, upon which he would be at liberty to draw through the Clearing House, and if it became necessary the bank could borrow from the Clearing House, through the pooled credits of all its members, Clearing House loan certificates to the amount of one hundred and fifty thousand dollars (the Clearing House requiring a margin of thirty-three and one-third per cent).

The merchant would then inform his bank that he needs currency for pay-rolls. His bank could provide for his needs in this respect by requesting the Clearing

House to deposit the one hundred and fifty thousand dollars of certificates with the subtreasury, and receive seventy-five thousand dollars in emergency circulation, which in turn could be handed to the depositor.

In times of very active money and panic periods, the bank and the merchant are willing to pay a high rate of interest for this privilege, and as soon as the stress and storm are over and money returns to its accustomed channels, lawful money could be deposited and the emergency currency retired. The merchant's collections would be made, his paper retired, and it would have served the purpose for which it was created. This same method could be pursued with all borrowers who needed assistance, either merchants or banks.

This would seem to me to provide a safe emergency circulation, having behind it: first, the credit of the institution and its collateral as passed upon by a committee of bank officers; second, the fact that a large margin of collateral is required before certificates are issued; third, the fact that the government is asked to advance only fifty per cent on Clearing House loan certificates; and fourth, the certainty of its prompt retirement in lawful money of the United States.

AMERICAN AND EUROPEAN BANKING METHODS AND BANK LEGISLATION COMPARED

BY

PAUL M. WARBURG

AMERICAN AND EUROPEAN BANKING METHODS AND BANK LEGISLATION COMPARED

I

A comparison of European and American banking methods and legislation is so broad a subject that it cannot be fully dealt with in a single address. It will, therefore, be necessary to limit ourselves to the broad outlines of the subject. We shall endeavor to state the general basis of the banking business in Europe and to compare it with our own, and where European methods differ from each other in detail, we shall single out for the purpose of comparison that system which is generally acknowledged to be the most efficient. Furthermore, in speaking of Europe, we shall understand the term to mean primarily the three prominent financial powers, — England, France, and Germany.

Let us begin by establishing the line on which modern banking has developed. From the primitive method of bartering goods for goods, exchange gradually develops to the acceptance of an acknowledged standard or measure, be it the accepted value of an ox, a slave, a woman, a measure of grain, or a certain weight of metal. Those means of exchange which prove the most durable and, at the same time, are the handiest because, being the most precious, they absorb the least space, are finally evolved as the best measures of value. Thus gold and silver of officially certified weight and fineness have developed as the coin and currency of nations. The next evolution is that, instead of accepting and carrying about clumsy masses of metal coins, the owner is satisfied to accept a certificate of ownership of metal — the note. Here we see the first

appearance of credit. Credit means, literally, faith; it is faith in the bank or government issuing the paper representing the bullion. We reach a state of modern banking, however, only when to this credit, which still means payment for each transaction in coin or coin certificate, are finally added other bank credits, which become part and parcel of the banking system. This means that instead of paying by money only, the vast majority of the payments are effected through transfer of credits; it means payment by check. I need not dwell at length on this question of deposits and checks, as it has been fully dealt with in some of the preceding addresses. The check, however, is only one of the factors, although a very important one, that constitute a modern banking system: many other currency-saving devices which prevent the use and absorption of cash have to be added to render the system a perfect one. We must add a modern system of bills of exchange (by which we mean two- or three-months paper drawn on banks or bankers or indorsed by them) well regulated by clear and simple laws. As the check acts as a means of transfer of cash credits from one owner to another, so the transfer of the acceptance of a bank is the transfer of credits on time; it is like the transfer of banks' interest-bearing certificates of deposit on time. We shall have to deal fully with this important question a little later. As parts of a modern banking system we must further add well-organized stock and produce exchanges and clear and simple laws regulating the administration of corporations, and the issue, the transfer, and ownership of securities. All these refinements of our business intercourse, if I may so call them, have the object and effect of minimizing the physical transfers of property, and of reducing to a minimum the dangers of such transfers by establishing well defined and generally accepted laws and regulations

governing such transactions, by avoiding unnecessary payments (through clearings), by liquidating whatever balances remain to be settled with the smallest possible use of currency, and by concentrating into large centers all offers for purchase or sale, so that on a common meeting ground of buyers and sellers the exchange of properties can be effected with the least expense, the least risk, and the least delay.

To transform the unsalable individual part-ownership or individual indebtedness into stocks and bonds having a wide market, and to standardize merchandise, is an important step in the development of this time-, risk-, and currency-saving device, without which modern banking is inconceivable.

We have to add one more factor and a most important one: the partial replacement of money by instruments of credit must needs bring about, as a logical consequence, the necessity of reserves of money to meet these credit tokens, to redeem which cash may of right be demanded. How large these reserves must be depends largely on the strength of the confidence — the credit — upon which the general structure is erected, and on the degree of perfection with which these reserves may be made available.

An ideal banking system is that which provides for the legitimate needs of a country at moderate rates with the maximum use of credit and the minimum use of cash, which checks illegitimate or dangerous expansion or speculation, and which avoids or minimizes as far as possible all violent convulsions.

We need not emphasize the fact that the European system comes very near accomplishing this ideal, while our system has proved palpably inefficient. Recent events have again brought it home to us that the richest and soundest country of the world went into a disgraceful state of temporary insolvency, while European nations,

poor by nature and loaded down with much heavier burdens than we, have weathered similar storms without any such panic and wholesale destruction of property values. Let us consider, then, wherein our system differs from theirs, and let us see which component parts are missing in our machinery.

II

If we may anticipate our conclusions, we may say that our methods are completely opposed to those of European countries.

The European system aims at centralization, ours at decentralization. Europe believes in and has established a system of central banks, issuing an elastic currency which follows the requirements of commerce and trade and is based, more or less, on bills of exchange; while the United States has so far refused to reëstablish a central bank and persists in maintaining a system of inelastic currency issued by 6500 banks. The European system is built on modern bills of exchange, which form the quickest assets; while in the United States, the rediscounting of paper by banks being practically unknown, the chief quick assets relied upon by the banks are call loans on stock-exchange collateral. Europe has a system of general banks with large capitals and branch banks all over the country; we prohibit a similar branch-bank system, and prefer a network of 20,000 small independent banks and trust companies. Europe believes in a system of monthly or half-monthly liquidations for stock-exchange transactions, while the United States maintains daily settlements. Europe has succeeded in working out for each country clear, generally observed, and uniform laws, regulating all commercial and financial questions; while in the United States not only do the laws differ in the various commonwealths, but the underlying

principles are not so clearly and so definitely laid down as abroad, and every now and then the basis of the business structure is violently shaken by some new interpretation or legislation, or temporarily upset and endangered by sweeping injunctions.

In order fully to understand the European system, it will be necessary to explain at the outset the importance of the bill of exchange in Europe in the financial intercourse amongst individuals as well as amongst nations. In the United States our commercial paper is the old promissory note, *it is a* BILL; in Europe commercial paper is a *bill of* EXCHANGE. I think that I cannot more forcibly express the difference between the two. In the United States this promissory note is an investment, in Europe it is a means of exchange. If, in the United States, this promissory note has entered the bank, it usually remains there until it falls due; if a New York bank, under normal conditions, would try to rediscount such paper, it would create suspicion and distrust. This means that every dollar invested by a bank in American commercial paper, that is, every dollar invested to satisfy the most legitimate requirements of business, leads, without fail, to a locking up of cash in unsalable assets. We have been shown bricks of the time of Hammurabi, the Babylonian monarch, evidencing the sale of a crop and similar transactions, and I am inclined to believe that it was as easy, if indeed not easier, to transfer the ownership of these bricks from one owner to another, as it is to-day for an American bank to realize upon its discounted paper.

Let us now observe the absolutely reverse method of the European countries. In Europe there are scores of banks and private banking firms that give their two or three months' acceptances for the commercial requirements of trade, or that make it their specific business to indorse commercial bills. A commercial borrower

in those countries who does not get a cash advance will do one of two things: he will either sell to his bank or his broker his own three-months' bill, drawn on a banking firm willing to give him this credit; or he will sell the bill drawn by him on his customer in payment for goods sold to him, which bill may be subsequently passed on with the indorsement of the banker. Through the addition of the established credit of the acceptor, or by the various indorsements on the bills, the quality of the bill becomes such as practically to eliminate the question of credit and risk, and the conditions of the sale will depend only on the rate of interest. From being a scarcely salable promissory note, the ownership of which entails a more or less pronounced commercial risk, the paper has been transformed, if I may call it so, into a standard investment, the equivalent of which in cash can be easily secured at any time.

This prime constituent of the European banking machinery is entirely missing with us. Its existence is, however, most important. Without such paper, the government banks of Europe could not accomplish their work; and *vice versâ*, the rôle which this paper generally plays in Europe's financial household is dependent on the existence of central banks. The two cannot be separated.

It is one of the main duties and privileges of the government banks to buy legitimate commercial paper, with bankers' acceptances or bankers' indorsements. As the government banks buy this paper, the circulation of the notes which they issue in payment increases, and on the other hand, as they collect this paper upon maturity and reduce their discounts, their outstanding circulation decreases. This means that they expand or contract according to the requirements of trade. However, this is not a merely automatic process. For as those intrusted

with the management of the government bank see the necessity of exercising a restraining influence, they raise the rate at which the bank discounts, and in this they are generally followed by the other banks of the country. In the same way, if the government bank finds it advisable for any reason to discriminate against the paper or the securities of certain groups or individuals, general discrimination by the other banks will usually follow. It might be well to add that the European government banks are not limited to the purchase of paper, but that they also have the privilege of making advances within certain limits upon securities up to a fixed percentage of the market value, according to stated published schedules. The rate, however, at which such advances may be made as well as the government bank's discount rate is uniform for everybody and is, as a rule, so much higher than that of the general banks, and the restrictions as to the character of the securities on which the government bank may advance are so much more rigid, that in normal times the bulk of the business is done by the general banks. Only when the demand for money increases, does the rate of the general banks begin to approach that of the government bank; but in that case the government bank will, as a rule, raise its rate, so as again to increase the margin over that of the general banks. The government banks consider themselves, more or less, as constituting the national reserve, ready to take an active part in the nation's business only in times of emergency. A distinction is, however, carefully to be drawn between the abnormal crisis and what we may call the normal emergency which arises regularly in consequence of certain economic developments, like crop movements or particular requirements for special industries at fixed periods, and which, as experience has shown, subside after a time as regularly as they occur. When these normal emergencies arise,

the banks do not unduly raise their rate, but, for the time being, meet all the requirements at a given rate, and allow their circulation to increase, while the reserves go down. When the government banks anticipate, however, that more than a normal emergency will have to be dealt with, they continue to raise the rates in order to protect their reserves and to force liquidation, and in order to deter all branches of industry and trade from entering upon far-reaching new engagements.

The notes which the government banks are allowed to issue are limited by the amount of gold and bullion which must be held to cover them in full, or, as in Germany, up to at least thirty-three per cent. It would, however, lead too far astray to go into the details of these special regulations which govern the issue of notes in the different countries. It will suffice here to outline the general rule. Each government bank has a very decided interest in keeping its gold holdings as large as possible, and in preventing the gold from leaving the country. If an augmented demand for money and credit accommodation increases the amount of notes outstanding, the government bank, by raising its rate, purposes not only to encourage a general contraction of business, and to force the general banks of the country to contract, but also to attract foreign money into the country. If England has a private discount rate of, say, six per cent, that is, if first-class commercial paper accepted or indorsed by banks can be bought on an interest basis of six per cent, and if, at the same time, there is in France a discount rate of four per cent, it stands to reason that the big French banks and the French public will invest in English bills, and that French money will go to England. The same holds good, of course, as to German, Austrian, Russian, or Scandinavian bills. It is, for instance, well known that at present, while rates in Germany are high and in

France comparatively low, hundreds of millions of German paper are held by the French banks.

The French banks would not buy the individual note of an English, German, Russian, or Scandinavian merchant whom they do not know; but they do know, and must know, the value of the acceptance or the indorsement of the foreign banks, which offer and indorse or accept this paper. They would not buy this paper, unless they knew that it can be rediscounted at any time through the existence of a central bank in the home country. None the less, however, the bulk of the business transacted by a central bank is only a fraction of the total business of the country, and is, in normal times, limited almost entirely to the purchase and collection of short bills. The mere existence of the central bank, however, enables the general banks to discount freely; and as everybody thus discounts freely, there is the widest possible market for discounts even without any active purchases by the central bank.

While we cannot attempt to give any full description of the working of central banks, it may be well to add that some, like the Banque de France and the Reichsbank, have hundreds of branch offices, spread all over the country, which, in Germany in particular, have developed an admirable system of collection and of transferring moneys from one place to another. It may also be interesting to note that, contrary to a wide-spread idea, the central banks of Europe are, as a rule, not owned by the governments. As a matter of fact, neither the English, French, nor German government owns any stock in the central bank of its country. The Bank of England is run entirely as a private corporation, the stockholders electing the board of directors, who rotate in holding the presidency. In France the government appoints the governor and some of the directors (*régents*). In Germany the

government appoints the President and a supervisory board of five members, while the stockholders elect the board of directors. The German government receives three-quarters of the profits after the stockholders have received a dividend of three and one half per cent. Thus the central banks are independent of direct government interference, or there is a joint control by government and stockholders. But the government is the largest depositor of the bank, and is thus obviously, both for its own credit and for the welfare of the nation, vitally interested in maintaining its credit at the highest possible notch.

The consequence of a broad bill market is, that, whereas our banks keep against their deposits primarily call loans on stock-exchange collateral, a European bank or banker will keep against his demand obligations a large amount of banking paper, which he can sell at any time at the discount rate, without causing any such commotion as is created with us when call money is rapidly withdrawn from the stock exchange.

Call-money rates and their daily fluctuations do not directly affect European stock exchanges. Europe has developed a system of monthly or half-monthly settlements on its stock exchanges, which means that from one settlement to the other, the amount of cash required by the stock exchange remains stationary. If, at the settlement, it develops that commitments on the stock exchange have increased, and that a larger amount of money is needed for stock-exchange loans under normal circumstances, so much more money will be withdrawn from the bill market and go into the stock exchange. If less money is wanted by the stock exchange, so much more will go into the bill market. We cannot dilate fully on the interesting question of the comparative merits of daily versus monthly stock-exchange settlements. It may, however, be said that if it is a saving not to settle

each transaction by individually delivering and paying for each purchase and sale, but to pay and deliver only the balance of the whole day's transactions by one clearing (without which it would be impossible to deal in a million shares a day), then the saving would be still further increased if the clearings covered not only one day, but a whole week or a whole month. It might, however, be asked: Why not then clear only once a year? The answer is that, until the transaction is actually paid for, there is a risk that with wide fluctuations one of the contracting parties may not be able to pay the difference between the price on the day on which the business was concluded and on the day when it would be finally settled. That is the reason why settlements in England do not exceed two weeks, and why in New York they should probably not exceed one week, for which period some method of clearing the differences daily or of securing them by collateral might easily be devised.

The present American system of daily settlements, however, combined with the lack of a central bank and of modern paper, brings about the shocking conditions from which we are suffering. It is a fact that in Europe, where settlements exist, such wild fluctuations as prevail with us are unknown, except in our own securities.

Our much maligned stock exchange is the scapegoat of the nation; if trade contracts, the surplus money from the Atlantic to the Pacific is thrown on the stock exchange, creating easy money and encouraging speculation in securities just at a time when speculation ought to be slow. If industry and trade thrive, and are in need of money, call loans are withdrawn from the stock exchange, and, the more money is required by commerce and industry, the more the stock exchange will be depleted. The usual consequence is our annual money panic, and a resulting violent collapse of prices of securities.

This obnoxious system of cash dealings is forced upon us as the result of our unreasonable usury law, which, although making it unlawful to take more than six per cent on time loans, is in reality the direct cause of an almost confiscatory rate being charged from day to day for weeks at a time. We shall dwell upon this law later. The fact remains that with a legal limit of six per cent for time money, and with the desire of the banks not to charge merchants a higher rate, and with the lack of any modern paper which we could offer to other nations, there remain practically only two means of relieving the stringency and of attracting foreign money. These are the utilization of foreign credit, through long bills drawn by our banks or bankers on Europe (and these could hardly be used during the last crisis in consequence of England's drastic measures) and incredibly high rates for call money, that bring about wholesale realizations, and attract foreign buyers at our bankruptcy prices.

Banks have been blamed for the high rates and for having had so much money on the stock exchange. They are absolutely helpless with regard to both. How could a bank withstand a run, if it had all its money in unsalable commercial paper, and how is a bank to meet the demands made upon it otherwise than by drawing upon its quick assets, viz. its call loans. It is our system that is wrong from top to bottom; it is this and not the individual that is to be blamed in this respect.

The aggregate amount invested in trade and commerce must vary. Its grand total should be many times the amount invested in stock-exchange loans, which represent the securities carried for speculative investors. Our way of doing business may be illustrated by two adjoining reservoirs, a small one and a very large one. The small one represents the stock exchange and contains the call loans; the large one represents the general business of

the country, as expressed by commerce and industry. In Europe they regulate the small reservoir by pumping water into it from the large one, or by withdrawing water from the small reservoir into the large one. In this way, the outflow and inflow in the large reservoir are scarcely perceptible, and there is no difficulty in regulating the small one. With us, we do the reverse. If there is a shortage of water in the large reservoir, we begin to draw on the small one and, in order to increase the water in the large reservoir by an inch, we empty the small one altogether or, in order to decrease the amount of water in the large reservoir by an inch, we fill the small one to the overflowing point. Moreover, Europe can tap a third reservoir, the additional currency issued by a central bank, with which to regulate the large reservoir if it fluctuates more than a few inches, while with us no such final reserve exists. As a consequence, fluctuations of several feet appear to be inevitable and regular occurrences with us. It may be added that not for many years has the European reservoir shown such variations as this year, and we must sadly admit that Europe's abnormal rates were due largely to our own unbalanced conditions. Unable to regulate our own household and to use our own gold, we have accustomed ourselves to use and to abuse Europe, which suffers intensely from our lack of a proper system.

III

Let us now add a few words about European and American banks in general.

We have in the United States national banks, state banks, and trust companies, practically without any proper line of demarcation; they are all, more or less, doing a similar business, except that the national banks have the privilege and duty of providing currency against government bonds. In Europe we find the privilege of

note issue restricted to the government banks, which are hemmed in by such regulations as to keep them out of speculative business or general commercial transactions. Whenever a note-issuing bank desires to enter upon general business, it has to abandon the privilege of issuing notes.

Outside of the note-issuing banks the only European banks that are regulated by law as to their investments and their way of doing business are the savings banks. For all other banks there is no government supervision, no laws as to their reserves against deposits, and no restrictions as to indorsing or establishing branch banks, etc. On the contrary, accepting, discounting, and indorsing paper form the essence of Europe's banking, which is built up on a system of old, established, very important, general banks with large capital and with a network of branch offices and agencies all over the country, and in the centers with many branch offices in a single town. On the whole, this system of making large responsible banks and their branches the custodians of the people's money is preferable to our system of allowing a few, often irresponsible, men to get together, hire some ground-floor corner, fit it up in marble and bronze, and call it a bank, with a capital of $100,000, and often less, and a corresponding surplus paid in, not earned. Small banks constitute a danger, particularly so, if they accumulate deposits which are out of proportion to their own resources. There is an old French and Italian banking rule that deposits ought not to exceed four or five times the amount of capital and surplus. This rule is certainly a wise one for a country with such an imperfect banking organization as the United States.

While Germany and France may claim the best government bank organization, there has been too much concentration in the business of the general banks of these

two countries. The German and French banks have accomplished a wonderful piece of work, but their system of "taking it all," being banks of deposits, discounters, acceptors, indorsers, brokers, and underwriters at the same time, is not free from danger. Not that there is risk of their getting involved, but there is too much elimination of independent firms, which constitute a valuable backbone, especially in times of need. In Germany, where this process has been most marked, there is a strong movement on foot to undo the harm that has been done.

The English system has, in this respect, so far proved the best, for the reason that, while they have large deposit banks with branch offices all over the country, they have kept these deposit-and-check banks comparatively free from commission, investment, underwiting, and kindred operations. In England the investment and the commission business remains mainly with the broker, while the contracting of large loans and the formation of syndicates is generally left to private firms, or if it is a question of South-American, Oriental, or colonial loans, to the banks which confine themselves to business with these countries. Again, there are foreign exchange houses and firms conducting exclusively an accepting and indorsing business; and finally, there are the big discount companies. One might say that every branch of these various enterprises is taken care of in an able and efficient manner in England: business is done at fair rates and, at the same time, substantial profits are earned.

In Europe the general banks are not required to hold gold reserves. Gold reserves are kept exclusively by the note-issuing central banks, which have outstanding on demand obligations payable in gold.

We ought carefully to draw the line between a working reserve and a gold reserve. A general bank has no need of a gold reserve. But every general bank or financial

institution ought to have a large working reserve against its demand obligations. Such working reserve, however, need not consist of legal tender notes, but of such assets as can be quickly turned into cash credits; be it call loans, bank paper, British Consols, or whatever can readily be made available in times of stress. In addition, the European banks generally have very large on-demand deposits especially with the central bank of the country, and, of course, a substantial amount of actual cash as it is required for the daily needs of the business.

But why should state banks or trust companies or national banks, if they happen not to issue notes, carry gold reserves? For their own protection they need strong working reserves, but, if it were not for our lack of a central bank and for the shortcomings of our Treasury system, why must they lock up legal tender notes to such an extent?

In Europe the gold reserve and the emergency reserve of the country are kept and managed by the central bank. We have already shown how the government bank acts in protecting the country and in providing for its needs. Let us clearly understand, that without the bank rate, that is, without the ability to regulate the rate of interest in times when the government bank's coöperation is needed, its efficacy would be *nil.* A system of modern banking paper is absolutely necessary to establish this power of the bank, and furthermore, a credit so firmly established, that the higher rate of interest will act as an inducement to invest and not as a breeder of distrust and an incentive to realize. A further requirement is a system of large and conservative banks that will coöperate, and that, as a matter of fact, cannot afford to abstain from falling in line with the general tendency initiated by the central bank.

With such a system, a panic like the one from which we are just emerging should be impossible. For no matter whence money is withdrawn, it would turn up in another

bank. It is inconceivable that conditions would nowadays arise in either England, Germany, or France where people would lose entire confidence in all banks, government banks and savings banks, so that actual hoarding and locking away of money would occur. Our worst hoarders, the banks and trust companies, would, under a European system, have no reason to lock up actual money, since they would be fully protected by accumulating a balance with the central bank. The unheard-of fact that during a scarcity of currency the banks, instead of disbursing their cash, begin to accumulate and actually to hoard currency, would be an impossibility.

There are two different kinds of panics or crises with which a nation may have to deal. One is a domestic drain, created by strong domestic demands, degenerating into a panic by some catastrophe engendering the fear that the supply of money will reach an end. Such panics must be met by paying out freely and boldly. Bagehot says: "A panic, in a word, is a species of neuralgia; and according to the rules of science, you must not starve it. The holders of the cash reserve must be ready, not only to keep it for their own liabilities, but to advance it most freely for the liabilities of others. In wild periods of alarm one failure makes many, and the best way to prevent the derivative failures is to arrest the primary failure which causes them." And further on he says: "It is not unreasonable that our ultimate treasure in particular cases should be lent; on the contrary, we keep that treasure for the very reason that in particular cases it should be lent."

Another kind of panic may arise through a drain from without. Such drain must be met in modern countries by increasing the rate of interest until the tide has turned, until the creditor finds it more profitable to leave the money where it brings attractive interest than to with-

draw it. Both kinds of panics have been successfully met, or have been entirely averted, in Europe by central banks and by a firmly established credit. Germany, for instance, without such a system, would now be in the midst of a panic; but she has safely avoided it, in spite of her being, by nature, a poor country, while we, Nature's spoilt children, need only be wise to be rich and safe.

As it is, we neither can protect ourselves by a discount rate, there being no discount system, no central bank, and no legal rate beyond six per cent; nor can we meet an internal panic because, irrespective of other shortcomings of our system, it forces each bank to look out for itself and to try to draw away the cash from the others, in order to increase the amount in its own vaults, thus aggravating the panic. While the only way to meet a panic should be to pay freely, any bold action is paralyzed by the frightful thought that there is no way of creating additional currency, and by the knowledge that, if the drain continues, there are no means of preventing wholesale individual failures unless general suspension of cash payments is adopted. While one thousand millions of dollars were lying idle in our banks and trust companies as so-called reserves, that is, as the final resort in case of need, this money, by virtue of the law, could scarcely be touched! What, then, is the use of such reserves, if they are not available in such times, and if, even in contravention of the law, they could not be used by one bank without fear of being ruined, unless all banks agreed to use them freely? And as it is impossible, even without such a law, to make all banks act in the same bold way, it follows that reserves should be concentrated, as they are in Europe, and that while the banks may be asked to coöperate, they must be governed in this respect by one central organ.

The question of treasury and government-bond secured

bank-notes has been so fully and so ably dealt with by Mr. Hepburn in a preceding address, that I can limit myself to the hearty indorsement of what he said in this respect.

The net result of our system is that immense amounts of gold and currency are wastefully locked up, and that, in spite of our immense gold treasure, which is four times as large as that of England, and notwithstanding our enormous *per capita* circulation of thirty-five dollars, we suffer almost annually from acute scarcity of money.

If we only had the means energetically to contract our currency, and to use our gold in a scientific and a practical way, we should have gold and currency enough to meet any panic. As it is, the amount of notes outstanding is about stationary in times of activity or stagnation alike, while as a consequence the rates for money vary between zero and two hundred per cent. In Europe it is the reverse; rates are fairly stationary and the amount of notes outstanding contracts and expands. With a cash balance of $260,000,000 during the recent crisis, our government had to incur new indebtedness to enable and to induce the banks to issue additional currency. Within three months the circulation increased through this artificial process by eighty million dollars, but the government had to lose about $1,000,000 of the people's money to reach this result. On the other hand, the German Reichsbank issued in one week, at the end of last December, M. 320,000,000 and the government received a five per cent tax on this issue, which is borne by those who received the money. These notes returned to the Reichsbank within less than three weeks.

Our present system of maintaining and selling government bonds on a basis so high that only national banks can buy them results in constant inflation of our currency by about seventy-five per cent of the amount

of new government securities issued from time to time. Inflation with practically no contraction! It would be cheaper and more straightforward if the government, instead of issuing interest-bearing government bonds, would issue new greenbacks. It amounts to the same thing, and the government would in addition not lose the interest.

Furthermore, our one-man-power system of the Treasury is contrary to European ideas; it is harmful to the country and unfair toward the incumbent of the office. While our generation has been particularly fortunate in seeing this office occupied by honest and able men only, the danger remains, nevertheless, that this vast power may one day be vested in less desirable men. Besides, the laws governing the functions and powers of the Secretary of the Treasury are old-fashioned, in parts too loose and in parts too extreme, and not clearly defined, so that even under the same President we find a radical change from one method to another, according to the individual interpretation by the incumbent of the office.

This lack of continuity is deleterious. Europe does not give such vast and arbitrary powers to one single political official, holding office only for a comparatively short time, and often without proper business training. On the contrary, the powers, clearly defined and properly restricted, are vested in a permanent non-partisan body of business men of the highest standard, thus constituting a system which insures clear legal conditions, safety, and continuity.

IV

A similar difference exists between the United States and Europe as to general legislation governing banking transactions and corporations. In dealing with these questions it is not my intention to accuse anybody nor to

excuse anybody; the only object of this investigation is to explain certain fundamental shortcomings of our system.

Modern banking is built upon gold — and confidence. The question of how to estimate working reserves, business risks and profits, as well as the general valuation of securities, all these are indissolubly interwoven with the other question of how firmly established is the confidence on which the whole structure rests and how far this confidence is liable to be shaken in normal and in troublous times.

The basis of confidence is an immutable belief in the continuity of political and social conditions, which are held to be safe and sacred. There must be faith in the continuity of the form of government, in the continuity of the legal status, and in the fair observance of law by government and governed alike. There cannot, however, be confidence in the continuity of the laws until they rest on a broad, equitable basis, and are fairly uniform over the entire country. There is nothing so harmful and so dangerous as the existence of two laws, the one a written law, unenforced and often impossible of enforcement, the other a customary law, which stands unchallenged for generations and which the written law cannot override, often because the latter, enacted in haste or hate, is incompatible with reasonable business usages and necessity.

Just and uniform laws, universally observed and equably enforced, imply wholesome government regulation. Loose or extreme laws that cannot be observed and that, therefore, are not generally enforced, but that may be suddenly and spasmodically enforced according to the whim of the people or of the party in power (yesterday a dead letter and to-morrow a firebrand), imply anarchy or autocracy. In financial matters Europe has advanced far in attaining the former condition; we have made little progress in emerging from the latter condition.

To cite only a few instances:

If the full taxes on capital, at present about 1.68 per cent, were exacted and paid, no capitalist could remain in New York.

If banks did not overcertify, our financial centers would have to stop business.

If it had not been possible to pay rates far exceeding six per cent for time loans, it would not have been possible a few weeks ago to draw so much gold from Europe, where money rates were above six per cent, and the catastrophe would have been still worse than it was.

But, we venture to ask, why is it necessary to force people to evade the laws in order to carry on business?

Among the important laws that have a distinct bearing on the banking situation, and that are in great need of revision, I should specify the following:

In the first place is to be put the usury legislation of our separate states and especially of New York. The usury laws in Europe, where they exist at all, apply only where the borrower is in dire distress when seeking and accepting a loan, and where the individual or corporate lender knowingly profits from his helpless situation when exacting usurious rates. Usury can be judged only in the light of the surrounding circumstances; and usury laws in Europe generally apply only to individuals. Our law, which prevents solvent firms of bankers, merchants, manufacturers, or brokers from contracting for money on time at more than six per cent, implies not only undignified tutelage, but unsound business judgment. The recent crisis has shown that it was not taking advantage of people in need to give them money on time at over six per cent; on the contrary, it would have been a blessing, and in many cases their salvation, if they had been able to receive the money at even a much higher rate. This unsound and completely indefensible usury law is, how-

ever, the reason why we must have daily settlements, and in this and other ways it indirectly leads to frequent convulsions of our money rates.

Secondly, the lack of a modern system for discounting commercial paper in the United States is due to the want of uniformity and precision in the laws governing bills of exchange, bankruptcy, etc. This uncertainty as to procedure forces us to prefer the well-defined promissory note — however unsalable — to the business of accepting and indorsing commercial paper at the low commissions customary in Europe. Furthermore, since our commercial business is chiefly financed by the national banks, it is a foolish regulation that prevents their indorsing or accepting such paper to any extent, in order that they may carry out the purely secondary object of issuing bank-notes.

Another difference between Europe and America that affects the banking business is the regulation of the issue of securities.

"Stock watering," that is, capitalization of earning power and of good will, is permitted in England and France, while it is not allowed in Germany. While, personally, I prefer the German system, it is a mistaken idea to think that the capitalization of earning power necessarily means taking advantage of somebody. If the German sells at two hundred per cent an industrial stock paying ten per cent dividends, it amounts to the same as if the Englishman had sold at par twice the amount of shares on which five per cent dividend is paid. But whether we adopt the one system or the other, it is of the first importance that the public should be fully informed as to the real value of the stock which it acquires, and that the law should be clear and definite in its terms and equal, rather than erratic, in its enforcement.

In Germany the law makes all public offerings of securities and applications for listing on the stock exchange

dependent on the publication of a full prospectus. This document must contain all facts of importance concerning the security offered and must be submitted to, and approved by, a state commissioner. Anybody withholding information, or furnishing wrong and misleading information, is criminally liable. At the same time, the law requires that balance sheets be published regularly and, where the issue deals with a new flotation, the prospectus must state clearly the value and the price of the properties transferred to the corporation at the time of its incorporation, and in certain cases also the names of those from whom they were bought.

We come finally to one of the most important of the subsidiary points affecting our banking system, namely, the relation of the directors to the corporation. In most of the European countries, particularly in Germany and France and, to a certain extent, in England, this relation departs radically from our custom. The French and German corporation is managed by a board of directors and salaried managers. The latter are not members of the board, as is the managing president with us. The board of directors in Europe supervise the managers, who have to report to the board about their acts and proposed acts, in order to secure their sanction. The rule is that both the managing officers, whose fixed salaries are comparatively small, and the board of directors share in the profits of the company. The stockholders ordinarily receive the first four per cent, while of the surplus over four per cent, a certain proportion goes to the managing officers and their staff and to the board of directors. As the corporation grows, the percentage going to the directors and the managers is frequently modified to whatever the shareholders consider a fair compensation. The net profit of the forty-five important German banks for 1906 was M. 231,000,000. The aggregate capital of these banks was M. 2,198,000,000

with a surplus of M. 542,000,000, making their total resources M. 2,740,000,000. Of this net profit about M. 200,000,000 were paid out; about one-seventh, viz. M. 28,000,000, was paid to the managers and staff and to the directors, while the remaining six-sevenths, being M. 171,000,000, were paid to the stockholders, being an average dividend of 8.07 per cent.

The underlying idea is a very different one from our own. The European maintains that, in order to hold any one liable in case he does not perform his duty, one ought to pay him if he does. In Germany, for instance, if a director does not act with what would be deemed ordinary business prudence, and if he neglects his duties, so that the company suffers loss, he is made personally liable. In the very rare cases of bad bank failures which Germany has witnessed, like that of the Leipziger Bank, —which, however, owing to Germany's admirable system, passed by without any panic, —the directors, amongst whom were men of many millions, lost all they possessed.

While the law is thus very rigid, it does, on the other hand, not require the director to be anything more than honest, or than to use the utmost possible care. But the board members in a bank, who receive quite a large income through their share of the profits, realize that they must in turn devote a good part of their time and energies to the interests of the bank. All corporations, like the big shipping lines, the industrial concerns, and the insurance companies, are run exactly on the same system. As a result, the so-called dummy director, so familiar to us, does not exist, because every director is materially concerned in seeing to it that the interests of the company are fully safeguarded at all times, and that no one director or manager receives any profits that might be detrimental to the corporation; while at the

same time this system makes the directors disinclined to consent to over-capitalization.

With us, on the other hand, the laws and usages regulating the relations of director to stockholder need much modernizing. We do not pay our directors, for ten dollars or so per meeting cannot be considered a remuneration. Under the old system it was considered good style to be on the board of a bank, as it was to be on philanthropic, religious, or educational boards; membership was, in fact, largely a social function. Or, on the other hand, some individuals were willing to join a board without any compensation, because it was their own business that they were managing; *e.g.* their own railroad, for which they had to supply the wherewithal themselves, and the territory of which they had to open by taking up farming or mining or by starting other industries. In such cases they sometimes made money and sometimes suffered heavy losses; but on the whole, it was this system of directors as chief stockholders and ever active prospectors, assuming large risks themselves, that developed the country and made it what it is to-day.

In the course of time, however, as the corporations grew in size and number, directorship ceased to be a social function, and the corporations ceased to be the property of a few. They became the property of a large community of stockholders, and the directors, from being majority stockholders, slowly became trustees.

With the evolution of the modern conception of trusteeship has come the present tendency to endeavor to tie the director hand and foot and to hold him liable if anything goes wrong with the corporation. But let me ask, what right has one shareholder substantially to say to the other: "Go on the board, work for me, worry for me, give your time and spend your energy: we shall not pay you for it; but I shall hold you strictly accountable if anything happens

to my company. If you chance to have a business of your own, and if you find any time left for it, be very careful not to do any business with my company. Leave that privilege to me. Because you work for me, you lose that privilege; and because I do not work for you—I retain it." That is virtually the present attitude of the American stockholder and to a certain degree the legal status of the director. Let us do as the Europeans do, let us remunerate our directors in proportion to the dividends they earn for us, and then we shall not only have the full right to hold them liable and to ask them to give up certain privileges, but we shall at the same time have greater certainty that every director will be careful to do his best.

Banking, like almost all other commercial transactions, is in reality an insurance business. For each risk, we ask and receive a premium commensurate with the hazard of the transaction. In a city built on volcanic ground the insurance premium is high. Bankers' profits in America are higher than in Europe; but they must be high so long as, for lack of modern banking methods and of uniform and well-established laws, we live financially on volcanic ground. We have just passed through a pretty lively earthquake, and the losses which wiped out the profits of years show conclusively that the premiums earned were not too large, in proportion to the risk. Do not let us blame the insurance company, but let us be doubly careful to build only in steel and stone and let us build on solid ground. For, luckily, in this instance it is within our power to transform that volcanic ground into a solid foundation.

We are apt to think that our problems are peculiar to us and that we must find our own way of solving them. If we had only realized that American and European history is being written with the same ink, that man is man, with similar virtues and similar vices, on both sides

of the Atlantic, we might have learned much from experience, and might have been able to avoid much amateurish and harmful legislation.

Germany also had many sovereign states which ultimately formed a union. In each of these states there was a different legal system, — German law, Roman law, Code Napoléon and all kinds of local laws. Yet Germany organized a commission, which worked for twenty-five years and which finally completed a code of laws to govern the entire country. A uniform commercial code had, in fact, been created far earlier, and Germany has now for many years been enjoying the advantages of uniformity. With us, also, there are surely many questions, social as well as commercial, on which the East and the West, the North and the South, can agree, and where uniformity of state legislation can be secured — if for no other reason than to avoid the much disliked federal regulation.

In Germany, Sweden, and Switzerland — the last of the countries to adopt a central bank — we find that obstinate opposition was long directed against the creation of such a central institution, chiefly by the then existing numerous banks of issue, which feared lest their business might suffer. In each country in turn the very banks that were forced to abandon the right of issue in order to become banks of discount and deposit acknowledge to-day that they have derived nothing but profit from the change, and that the central bank has conferred unalloyed benefit on the entire country.

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While our investigation has disclosed the nature of the ideal, it has, at the same time, also made it evident that we are still far removed from this ideal; so far, in fact, that any attempt to reach it immediately would be futile.

We can, indeed, advance only step by step, but I am convinced that we shall never attain the summit of our ambitions or reach a completely satisfactory condition until we have worked our way to a central bank and to the adoption of clear and equitable statutes. We cannot secure uniform laws promptly, but we can begin by modifying some of the laws mentioned above, which are incompatible with common sense, and by creating truly responsible boards of directors like those in Europe.

We cannot have an effective modern central bank, because there are no modern American bills of exchange, and we cannot create a sufficient amount of modern paper without a central bank. We cannot have stock-exchange settlements without the abolition of the usury law; but even after its abolition we must have a bill market, before we can do away with daily settlements and call loans, based on these daily transactions. Nevertheless, every one of these changes will have to be effected some day, and it is all important that each successive step in currency and banking reform be made with this end in view.

From this standpoint it is evident why neither the Aldrich bill nor the Fowler bill can be deemed to be a step in the right direction. Every measure is bad which accentuates decentralization of note issue and of reserves;

or which exclusively uses bonds as a basis for additional circulation;

or which gives to commercial banks power to issue additional notes against their general assets without restricting them in turn in the scope of their general business, and without creating some additional independent control, indorsement, or guaranty;

or which gives arbitrary powers exclusively to political officers, often untrained in business, and usually holding office only for a short period.

A central clearing house, with power to issue against clearing-house certificates notes to be guaranteed by the United States, would, in my judgment, form the best solution for the time being. The creation of a central clearing house with a capital of its own and with a limited dividend, the surplus revenue going to the United States, would leave present conditions undisturbed, and, while offering immediate relief, would at the same time form a sound basis for future developments. The plan would possess the following advantages: —

1. The clearing house would have its own gold reserve.

2. It would centralize the additional note issue and would therefore do better service in permitting legitimate expansion as well as in forcing effective contraction, which, with sixty-five hundred independent note issuers, is well-nigh impossible.

While additional notes issued by a bank mean an increase of deposits, which may perhaps be called any day or which, on the other hand, may remain forever, an advance by the central clearing house would be made to the banks for a given period, after which the money must be returned. It would, therefore, be safer for the banks, and would at the same time insure contraction after a certain time, as in Europe.

3. The central clearing house would be able to accommodate commerce and industry in times of need by accepting commercial assets, provided that they are recognized as legitimate and safe by the indorsement of the local clearing houses.

4. It would leave our national banks without any further independent note-issuing power, and would in this respect be beneficial; for additional note-issuing power should logically carry with it further restrictions as to their privilege of doing a commercial business, whereas their privileges in this respect should rather be increased.

5. Through the share in the profits reserved for the government, the latter would receive some return on the funds which it would deposit with the banks through the central clearing house, whereas at present the government does not receive any such return.

6. It would form a medium through which gold loans might be contracted with European government banks in a way similar to that by which transactions have been concluded between the Bank of England and the Banque de France.

7. If there were formed to supervise the management of the central clearing house a central board administered by salaried managers, as in Europe, and comprising business men, largely selected from the clearing-house committees, as well as political officials, it would eliminate the arbitrary powers which the Secretary of the Treasury is now called upon to exercise, and it would create a continuity of policy, which is most essential for the development of the country.

8. Finally, it would show that this country is able to produce a body of men as honest, as trustworthy, and as efficient as those into whose hands Europe has confided the care of its central banks. As the confidence in this body grows, as the banks come to feel its beneficent influence, the powers of this clearing house may gradually be increased, and thus from the joint indorsement by the clearing houses we may gradually gain our way to the indorsement and acceptance by individual banks, so that we may finally be able to develop a central organ which, safeguarded from political and from financial domination and rigidly restricted as to its scope of business, will place us financially in a sound and healthy condition and which will cause us in this domain, as in others, to be respected as a modern and a completely civilized nation.

THE MODERN CORPORATION

BY

GEORGE W. PERKINS

THE MODERN CORPORATION

In the modern corporation we are confronted with a fact and not a theory. Whatever may be the individual attitude toward it, the corporation is here. What caused it, what it is doing, and what is to become of it are live questions, vital to all the people.

A corporation, in a way, is but another name for an organization. Broadly speaking, the first form of organization between human beings, of which we know, was the clan or tribe, in which the everyday conduct of the individuals was determined by the necessities of the group. This passed on into national organization, and then came the church as a growing and vast organization. Latest of all has come the organizing of business.

But before all this, in the very beginning of things, the universe was organized; and all that man has done in society, in the church, in business, and all that he ever can do in the centuries to come, can never bring to pass so complete a form of organization, so vast a trust, so centralized a form of control, as passes before our eyes in each twenty-four hours of our lives as we contemplate that all-including system of perfect organization called the Universe. It does not require a very vivid imagination to picture the waste, the destruction, the chaos, that would follow if there were not perfect organization, perfect coöperation, perfect regulation, perfect control in the affairs of the universe. How could we live, for example, if there were constant competition between day and night or a constant struggle for supremacy between the seasons? Does any one, for a moment, think that he

would prefer such a condition to the coöperation that now exists through all the affairs of the universe?

Organization being the all-permeating principle of the universe, the presumption is, therefore, in favor of organization wherever we find it or wherever it can be used. The corporation of to-day is entitled to that presumption; its underlying cause is not the greed of man for wealth and power, but the working of natural causes — of evolution.

Business was originally done by individuals trading with one another; then by a firm of two or more individuals; then by a company; then by a corporation, and latterly by a giant corporation or what is commonly (though perhaps inaccurately) called a "trust." Each step was brought about by some great change that took place in the conditions under which the people of the world lived and worked; each step was, in fact, mainly determined by discoveries and inventions of the human mind.

With the ox-team and the hoe we had men trading as individuals with individuals; with the sailing vessel and the stage-coach we had trade carried on by firms; with the advent of the company we had the locomotive, the steamboat, the reaping machine, and the telegraph; with the birth of the larger corporation we had the express train, the Atlantic cable, the ocean liner, the local telephone, the seeder, the reaper, and the binder; with the giant corporation came the Twentieth Century Limited, the crossing of the ocean in five days, the long-distance telephone, wireless telegraphy, and a great extension of machinery into agricultural work.

In our forefathers' time it took about half as long to sail down the Hudson River from Albany to New York as it now takes to cross the Atlantic. The actual distance from Albany to New York is no less, nor is the distance from New York to London any less, now than then; but

the inventions of man have so compressed both space and time that the financial and commercial markets of America and Europe are in constant exchange with one another every moment of the day. The business man in New York or Chicago can exchange several cable messages with London or Paris during the business hours of a day, and whenever an hour is clipped off the record of an ocean greyhound the people of the world are drawn so much nearer together. Because of the inventions of man, the great American desert of our boyhood geographies has, within a comparatively few years, largely become a vast fertile field; and, again because of these inventions, coupled with organized business methods, the product of this vast field is being marketed in remote parts of the globe.

The days when business was a local affair of individual with individual were the days when people were scattered, knowing little of each other and having no dealings with each other outside the radius of a few miles. Then steam and, later, electricity came into man's service; and then, by leaps and bounds, the possibilities of trade became extended to a radius of hundreds of miles, even of thousands of miles. Vast possibilities of international trade loomed up. The corporation sprang into active being as an inevitable result of this expansion of trade; for no one man, no firm, no small company, could provide the capital or the organization to cope with such opportunities. The only bridge that can span the ocean is the corporation. The real cause of the corporation was not so much the selfish aims of a few men as the imperative necessities of all men.

The first stage of corporationism was one of conflict — the old destructive competition carried forward under the new business forms. Trade could be carried farther, much farther than before; and so A invaded B's territory

and B retaliated. The fighting became faster and more furious, and the war in commerce became a hand-to-hand conflict. The trenches were being filled with able, splendid men who fell in the colossal struggles. Cut rates and rebates became the order of the day. Many railroads and many houses which had been successful in legitimate lines of business went down in bankruptcy. Labor suffered and the public suffered. The cost of doing business steadily increased, for war costs money. It became imperative that something be done to end the havoc. Prosperity could come only with peace. Instinctively, in a way unconsciously, men began to get together, not so much for profit as for protection; and so, under conditions which, in the mechanical development of the world, came on as naturally as day follows night, the great corporation came into existence and is the live, burning issue of to-day.

Perhaps the most useful achievement of the great corporation has been the saving of waste in its particular line of business. By assembling the best brains, the best genius, the best energy in a given line of trade, and coordinating these in work for a common end, great results have been attained in the prevention of waste, the utilizing of by-products, the economizing in the manufacture of the product, the expense of selling, and through better and more uniform service.

This same grouping of men has raised the standard of their efficiency. Nothing develops man like contact with other men. A dozen men working apart and for separate ends do not develop the facility, the ideas, the general effectiveness that will become the qualities of a dozen men working together in one cause. In such work emulation plays a useful part; it does all the good and none of the harm that the old method of destructive competition did: the old competition was wholly self-seeking and often

ruinous, while the new rivalry, within the limits of the same organization, is constructive and uplifting. Thus the great corporation has developed men of a higher order of business ability than ever appeared under the old conditions; and what a value this has for the coming generation! The opportunity, the inducement it provides to become all-around larger men than those of earlier generations could become!

We have heard many warnings that because of the great corporation we have been robbing the oncoming generation of its opportunities. Nothing is more absurd. The larger the corporation, the more certain is the office boy ultimately to reach a foremost place if he is made of the right stuff, if he keeps overlastingly at it, and if he is determined to become master of each position he occupies.

In the earlier days the individual in business left his business, as a rule, to his children—the firm to its relations. Whether or not they were competent did not determine the succession. But the giant corporation cannot act in this way. Its management must have efficiency,—above and beyond all else it must have the highest order of ability; and nothing has been more noticeable in the management of corporations in the last few years than that "influence," so called, as an element in selecting men for responsible posts, has been rapidly on the wane. Everything is giving way and must give way to the one supreme test of fitness.

And is it not possible that the accumulating of large fortunes in the future may be curtailed to a large extent through the very workings of these corporations? Are there not many advantages in having corporations in which there are a large number of positions carrying with them very handsome annual salaries, in place of firms with comparatively few partners, the annual profits of

each one of whom were often so large that they amassed fortunes in a few years? A position carrying a salary so great as to represent the interest on a handsome fortune can be permanently filled only by a man of real ability, so that in case a man who is occupying such a position dies, it must, in turn, be filled by another man of the same order; while the fortune might be, and most likely would be, passed on regardless of the heir's ability. Therefore, the more positions of responsibility, of trust, and of honor, that carry large salaries, the more goals we have for young men whose equipment for life consists of integrity, health, ability, and energy.

Furthermore, the great corporation has been of benefit to the public in being able to standardize its wares, so that they have become more uniformly good. Wages are unquestionably higher and labor is more steadily employed, for, in a given line of trade, handled to a considerable extent by a corporation, there are practically no failures; while, under the old methods of bitter, relentless warfare, failures were frequent, and failure meant paralysis for labor as well as for capital.

The great corporation is unquestionably making general business conditions sounder. It is making business steadier, for one reason, because firms inevitably change and dissolve, while a corporation may go on indefinitely. It is making business steadier, for another and more potent reason, because it is able to survey the field much better than could a large number of firms and individuals, and, therefore, vastly better able to measure the demand for its output and, if properly managed, to prevent the accumulation of large stocks of goods that are not needed — a condition which often arose under the old methods, when many firms were in ruthless competition with one another in the same line of business, oftentimes producing serious financial difficulties for one and all.

Broadly and generally speaking, the corporation as we know it to-day, as we see it working and feel its results, is in a formative state. In many cases actual and desperately serious situations caused it to be put together hurriedly. In many cases serious mistakes have been made in the forms of organization, in the methods of management, and in the ends that have been sought. In some instances the necessity for corporations has grown faster than has the ability of men to manage them. Yes, mistakes have been many and serious. But the corporation is with us; it is a condition, not a theory, and there are but two courses open to us — to kill it or to keep it. If you would kill it, you must kill the cause, or the thing will come back to plague you. The principal causes are steam and electricity.

Could anything be more dangerous to the public welfare than steam and electricity themselves? Then why not prohibit their use and, so far as possible, abolish them? Has any one ever suggested this? No. Why? Because their benefits were too apparent; and so we have bent our energies towards regulating and controlling them by using all that is good in them and carefully protecting ourselves from all that is injurious. If we are not willing to exterminate the cause of corporations, we can never permanently exterminate the corporation itself. There is, then, but one thing left to do, viz. to regulate and control them, to treat them as we have treated steam and electricity, to use the best that is in them and to protect ourselves from the worst that is in them.

A large percentage of the mistakes of corporate management have occurred because managers have failed to realize that they were not in business as individuals, but were working for other people, their stockholders, whom they were in honor bound honestly and faithfully to serve; further, that they owed a duty to the general

public and could, in the long run, best serve themselves and their stockholders by recognizing that duty and respecting it.

Then, too, many of our corporations, being of comparatively recent origin, have, at the outset, been managed by men who were previously in business, in some form or another, for themselves; and it has been very difficult for such men to change their point of view — to cease from looking at questions from the sole standpoint of personal gain and personal advantage, and to take the broader view of looking at them from the standpoint of the community of interest principle.

It is by no means clear that the danger point in the development of corporations is found in the giant corporation. Indeed, it is more likely to be found in the corporation of lesser size, because the latter does not attract the eye of the public sufficiently to have its managers impressed with the fact that they are semi-public servants — responsible, not only to their stockholders, but to the public as well. It is easier and more natural for a giant corporation to adopt a policy of publicity with the public and of fair dealing with its associates in the same trade, because such a course, from the broad, far-reaching view of the great corporation, becomes the wisest, most successful course. Then again, the relation of the giant corporation to its labor is an entirely different relation from that of the small corporation or the firm to its labor; the officers and trustees of a giant corporation instinctively lose sight of the interest of any one individual because such interest at best is infinitesimal compared with the whole. This places the officers and trustees of the giant corporation in a position where they can look on all labor questions without bias and without any personal axe to grind — solely from the broadest possible standpoint of what is fair and right between the public's capital, which they represent, and the

public's labor, which they employ. In short, they assume on all such matters the attitude of the real trustee, the impartial judge, the intelligent, well-posted, and fair arbitrator.

The great semi-public business corporations of the country, whether they be insurance, railroad, or industrial, have in our day become not only vast business enterprises, but great trusteeships; and there would be far less attacking of corporations if this truth were more fully realized and respected. The larger the corporation becomes, the greater become its responsibilities to the entire community. Moreover, the larger the number of stockholders, the more it assumes the nature of an institution for savings.

It is not sufficient in corporate management to do the best one can from day to day. Corporate responsibility extends beyond to-day. It is the foresight, the planning ahead, the putting the house in order for the storms of the future, that are the true measure of the best and highest stewardship as well as of the highest order of managerial ability.

The corporations of the future must be those that are semi-public servants, serving the public, with ownership widespread among the public, and with labor so fairly and equitably treated that it will look upon the corporation as its friend and protector rather than as an ever-present enemy, above all believing in it so thoroughly that it will invest its savings in the corporation's securities and become working partners in the business. It would have been impossible, in the day of the ox-team, for people in every State of this Union to be partners in any one business; and yet to-day we have at least one giant corporation made up of partners resident not only in every one of our States, but in almost every country in the world, and reinforced by thousands of

its own employees having become stockholders themselves.

During the past few months, when the campaign against corporations was most intense, and when our country was in a turmoil of business perplexity and doubt, the people who, we are told, have so suffered because of the trusts and are so bitterly opposed to their existence, have been investing in these very securities to an unprecedented extent. To illustrate: during the past year the stockholders of the Great Northern Railway have increased in number from 2800 to over 11,000. The stockholders of the Pennsylvania Railroad have increased from 40,000 to 57,000. The stockholders of the New York Central have increased from 10,000 to over 21,000. During the same period the number of the stockholders in the Steel Corporation increased by over 30,000: the total number of individuals holding stock in that corporation now exceeds 100,000, and the average holding of the $868,000,000 of stock of the Steel Corporation is to-day about 98 shares per person. Can there, then, be any question that these great institutions have become semi-public, and when we contemplate the alternative of exterminating or of regulating them, must we not realize that they are owned, not by a few individuals, but by a vast number of people representing our thriftiest class? That these corporations have thus become not only vast business enterprises, but great and growing institutions for savings, surely imposes a new and more sacred responsibility, not only upon corporation managers, but upon legislators as well.

If the managers of the giant corporations feel themselves to be semi-public servants, and desire to be so considered, they must, of course, welcome supervision by the public, exercised through its chosen representatives who compose the government. Those who ask the public to invest

money in an enterprise are in honor bound to give the public, at stated intervals, evidence that the business in question is ably and honestly conducted; and they should be not only willing, but glad, that some authority, properly constituted by our government, should say to stockholders and the public from time to time that the management's reports and methods of business are correct. They should be willing to do this for their own relief of mind, since the responsibility of the management of a giant corporation is so great that the men in control should be glad to have it shared by proper public officials representing the people in a governmental capacity.

There is scarcely a corporation manager of to-day, who is alive to his responsibilities, to the future growth of this country, and to the enormous opportunities before us for foreign trade, who would not welcome this kind of supervision could he but feel that it would come from the national government, acting through an intelligent and fair-minded official. To be faced, however, with the requirement to report to and to be supervised and regulated by forty or fifty governments, with varying ideas and laws, of course suggests difficulties that are almost insurmountable obstacles. For business purposes, at least in the larger business affairs of this country and from a practical standpoint, state lines have been obliterated. The telegraph, the express train, and the long-distance telephone have done their work. For business purposes in this country the United States government is a corporation with fifty subsidiary companies, and the sooner this is realized the sooner we can get the right kind of supervision of semi-public business enterprises and, in this way, give the public the publicity and the protection to which it is entitled in the conduct of business by corporations. In no other way can the public be protected from evils in corporation management.

The criticism is often made that this would amount to bringing business into politics. That depends. We have at Washington a Supreme Court. Membership in that most honorable body is the goal of every aspiring lawyer. If, for distinguished service and ability, we honor lawyers by promoting them to decide our most difficult legal questions, why should we not honor our railroad men by promoting them to decide our most difficult railroad questions, our industrial men the industrial questions? For example: if we had at Washington a Railroad Board of Control, and that board were composed of practical railroad men, would not membership in such a board come gradually to be the goal of railroad men? And does any one, for a moment, think that if such a board were composed of practical railroad men it would be especially partial to railroad interests? Certainly not. Once on such a board, a man could not fail to recognize the great responsibility and honor of the office and administer it for the best interests of the public and of the railroads at one and the same time. Thus the business man would merge into the public official, no longer controlled by the mere business view, and would act the part of a statesman, to the improvement of governmental administration and not to the lowering of its level.

This kind of expert, high-minded supervision would not be opposed by the business interests of the country. What they dread is unintelligent, inexperienced administration. National supervision, under a law requiring that those who supervise should be practical men, thoroughly versed in the calling, would solve most of our difficult problems and be of the greatest possible benefit and protection to one and all.

To such rational supervision may we not look forward as a result of the sober second thought of the people and our legislators, of their calming down from the bitter

denunciation of corporations which has been the prevailing outcry for some years?

In spite of what apparently has been an almost persistent determination to misunderstand his real purpose, the fact is that President Roosevelt, from the time that he was governor of New York down to his message to Congress in January, 1908, has repeatedly proclaimed his belief that modern industrial conditions are such that combination is not only necessary but inevitable; that corporations have come to stay, and that, if properly managed, they are the source of good and not evil.

The next period in corporation development should be a constructive one, constructive as to the relations of the corporation to its labor and to the public, and this can best be accomplished by the method of coöperation with supervision.

It is almost heresy to say that competition is no longer the life of trade. Yet this has come to be the fact, as applied to the old unreasoning and unreasonable competition, because of the conditions of our day. The spirit of coöperation is upon us. It must, of necessity, be the next great form of business development and progress. At this moment many people are looking askance upon the change, still believing in the old doctrine. They hold to it for several reasons: first, because they have inherited the belief; second, because they think that competition means lower prices for commodities to the public; third, because they think it provides the best incentive to make men work. This may have been the best-known method at one time, but it is not and cannot be true in the mechanical, electrical age in which we live.

The highly developed competitive system gave ruinously low prices at one time and unwarrantedly high prices at another time. When the low prices prevailed, labor was cruelly hurt; when the high prices prevailed, the public paid the bills.

From every point of view the coöperative principle is to be preferred. It is more humane, more uplifting, and, with proper supervision, must provide a more orderly conduct of business, — freer from failure and abuse, guaranteeing better wages and more steady employment to labor, with a more favorable average price to the consumer, one on which he can depend in calculating his living expenses or making his business plans.

So much for corporations. Now may I detain you a moment longer while I say a word to the young men who are here to-day.

How hopeless would your condition be if the world were perfect, if there were nothing left for you to do to improve conditions, if those who had gone before had finished the job! Really, can you imagine a condition more discouraging, more hopeless to an oncoming generation? Happily, this is not your situation. Our corporations have made mistakes. Many of these have been pointed out. Things have been done wrongly. Many of these wrongs are now being corrected. But in those mistakes, in that mismanagement, lies the opportunity of the man of to-day and of the young man of to-morrow. Your task will be to search out and eliminate the bad in all that has preceded you, retaining the good, preserving and adding to it for the benefit of yourselves and of those who follow you.

Let us, then, take the best that we find, cut out the worst that we find, improve, develop, make more useful and beneficial.

In this great country of ours there stands out preëminently the inventive genius, the masterful ability, the resourcefulness, the courage, the optimism of America's business men. At no period in the world's development have there been in any given country at any one time so many

men of from twenty to thirty years of age, standing ready to embrace so many opportunities and to move on to such splendid achievements, as we have in our United States to-day. It cannot be possible that these young men will be pessimists, that they will miss the legion of opportunities that are theirs!

I wonder if many of you realize how fortunate in one respect alone you are as compared with the young men in many other countries. You are not obliged to spend a number of the most impressionable years of your lives in compulsory military service, learning to obey orders which have no relation to the realities of life and its actual successes. Those precious years in this country are given to you to observe, to learn, and to prepare for the practical work of the world. Your individuality is not hampered or circumscribed by your being molded into a machine in your early manhood. You are free to make of yourself what you will. What would the young men of Europe give for their opportunities if some magic wand could give them one currency, one language, one government, one people, from London to Moscow!

Success does not come by chance. It is an opportunity that has been lassoed and organized. I doubt if a man ever met with success, worthy to be called success, who was not an optimist, who did not believe in something, heart and soul, and who did not play fair. And remember that when you set about a task which you really want to accomplish, the work involved is not drudgery, it is the most invigorating sort of play.

Do not lose your red blood; whatever you are, wherever or however you are situated, keep your heart warm and your humanity at par. Push forward; be of good cheer. Believe in our people, in our methods, in our country, in your neighbor and in yourself; and remember, if you are going into business, that, after all is said and

done, — after your fortune is made, however great it may be, — in the small hours of the night, in your heart of hearts, the thing you are really going to enjoy, take satisfaction in, and be proud of, the thing that will carry you over the rough places, that will keep your heart strong and your brain clear, will be the thought of what you have done to help others, what you have left to a world that has offered so much to you.

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